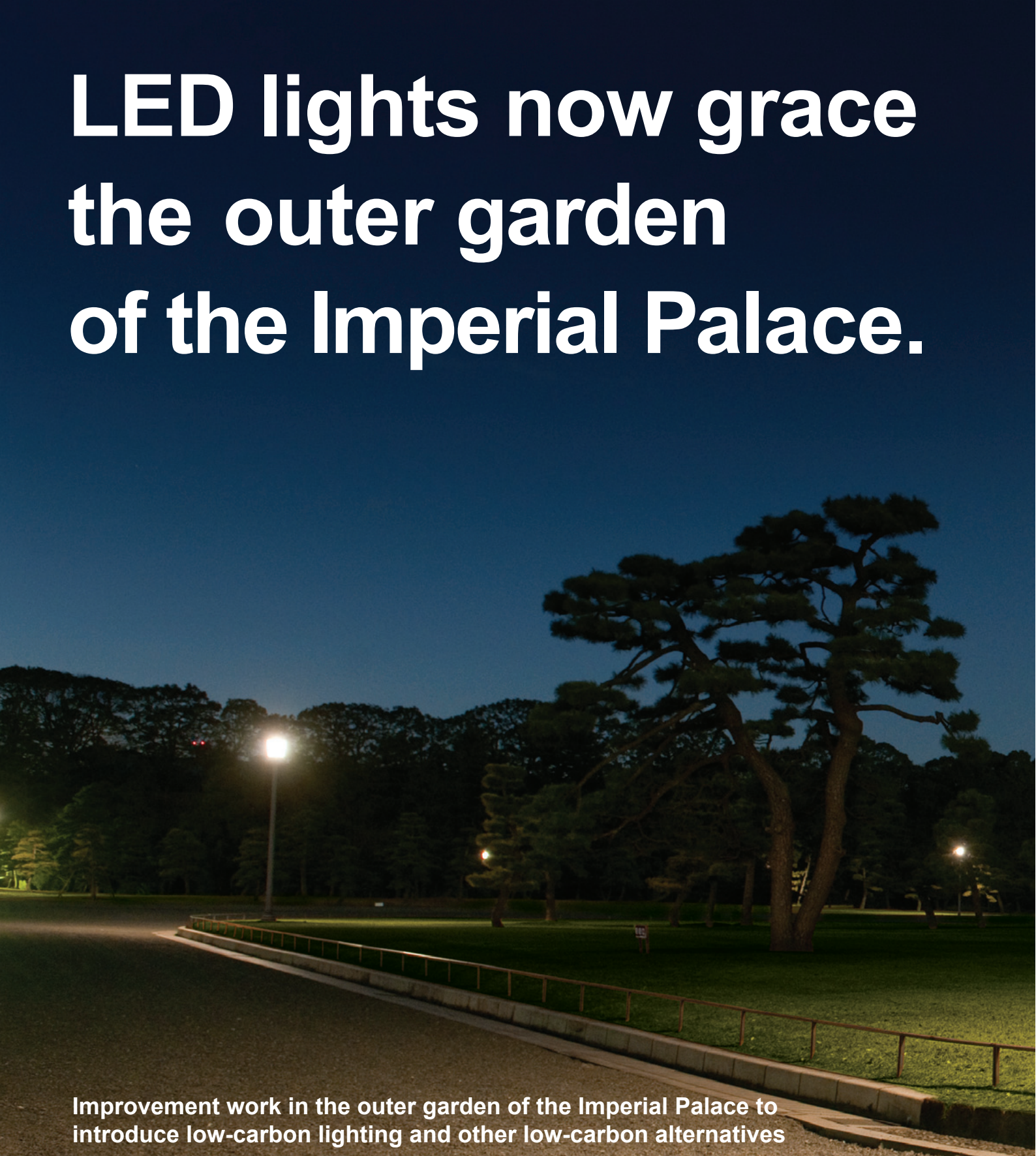
IWASAKI

LEDioc LED Products

LED Iwasaki Optical Control

IWASAKI ELECTRIC CO., LTD.

LED lights now grace the outer garden of the Imperial Palace.



Improvement work in the outer garden of the Imperial Palace to introduce low-carbon lighting and other low-carbon alternatives

Work has now started to replace existing lighting with LED lighting in the outer garden of the Imperial Palace, a national garden a large part of which is open to the public, to build a lighting environment that is environmentally friendly to prepare for a low-carbon society. This project substituted LEDs for incandescent lamps in landscape luminaires, sidewalk lighting, underwater lighting for fountains and other outdoor lighting in the three areas of the Imperial Palace Plaza, Wadakura Fountain Park and Kitanomaru Park in an effort to substantially lower CO_2 emissions. We were able to create a safe, secure and comfortable visual environment that also contributes to saving energy. In the shift to LED lighting and against a background of rapidly evolving LED technology, our ultimate goal in conducting improvement work was to develop new and better products.

As a light specialist, IWASAKI wants to be known as a company that protects our precious environment for the next generation by developing environmentally friendly products and pursuing the virtually limitless possibilities of light.

Improvement work in the outer garden of the Imperial Palace to introduce low-carbon lighting and other low-carbon alternatives

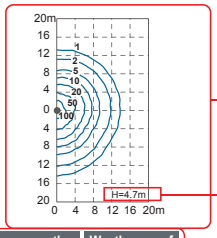
Major clients: The Ministry of the Environment, Kokyogaien National Garden Office
Design: Nikken Sekkei Ltd.
Electrical work: Chuo Denki Koji Co., Ltd.
Luminaires: IWASAKI ELECTRIC Co., Ltd.

What LEDioc can do for our society.

LEDioc series is the result of Iwasaki developments in technologies such as light distribution control and heat sink technology.
The drive force behind this is our goal to build a society where everyone can live safely and securely.
As a step on the road towards this goal, the LEDioc series provides efficient lighting that is considerate to the environment.

How to use this catalog

The following example shows how products are listed. Different types of luminaires are presented differently.



10 Luminaire installation height

1 High efficacy type | Initial luminous flux correction | Weather-proof

2 **E5016SA9N**

(Luminaire: E5016N-0 + power supply unit: WLE260V625M1/24-1)

3 (100 to 242V, 50/60Hz)

E5016SA9N/D Dimmable type

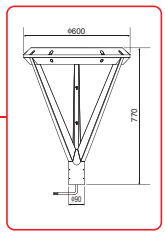
(Luminaire: E5016N-0 + power supply unit: WLE260V625M1/24-2)
(100 to 242V, 50/60Hz)

4

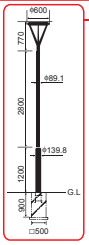
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
9,460ℓm	127W (100V) 124W (200V/242V)
Luminous efficacy	LED module life
74.5ℓm/W (100V) 76.3ℓm/W (200V/242V)	60,000hours
Light color	Color rendering index (Ra)
Equivalent to 5,000K (Daylight)	65

5 **Specifications**

Body: Diecast aluminum
Globe: Polycarbonate (clear)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 9.8kg



6



7 Light distribution pattern

8 Omnidirectional

Upward luminous flux ratio
5
0-5%
9

1 **Optical performance, function and structural features**

2 **Product model**

3 **Voltage and frequency**

4 **Illumination design performance data**
(excerpted from Japan Luminaires Association guide 134:2010)

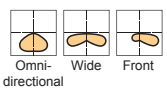
(1) **Rated luminous flux (luminaire luminous flux):** Initial luminous flux discharged by an LED luminaire in an environment where the ambient temperature is close to 25°C.
(2) **Power consumption:** Indicates the rated power consumption of an LED luminaire. This value indicates the rated power consumption for the primary side of an independent power supply unit for an LED luminaire equipped with such a unit.
(3) **Luminous efficacy:** It is a ratio of rated luminous flux to power consumption (in an environment where the ambient temperature is close to 25°C).
luminous efficacy (ℓm/W) = rated luminous flux (ℓm)/power consumption (W)
(4) **LED module life:** Indicates the total number of lighting hours after which the luminous flux drops to 70% measured relative to initial lighting.
(5) **Light color:** Indicates the correlated color temperature (in 100K increments) measured as prescribed by JIS C8152 "Measurement methods and photometry for white light Light Emitting Diodes (LEDs)."
(6) **Color rendering index (Ra):** Indicates the general color rendering index Ra measured as prescribed by JIS C8152 "Measurement methods and photometry for white Light Emitting Diodes (LEDs)."

5 **Product specifications**

6 **External dimension drawing**

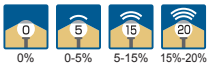
7 **Pole installation drawing**
(when luminaire is installed on a compatible pole)
* The foundation drawing shows a concrete base (see reference) on standard ground.
* Only LEDioc AREA, solar powered LED hybrid lights and solar powered LED lights are presented.

8 **Light distribution pattern**



* This catalog only presents LEDioc AREA, solar powered LED hybrid lights and solar powered LED lights.

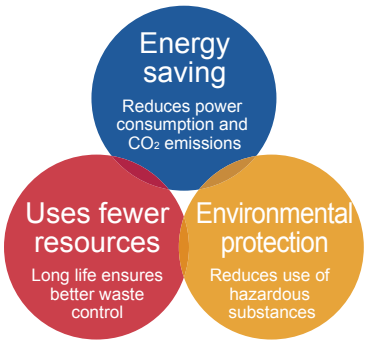
9 **Upward luminous flux ratio category**



Luminous flux emitted upwards from a luminaire that is indicated by a ratio (unit: %).
* This catalog only presents LEDioc ROAD, LEDioc STREET, LEDioc AREA, solar powered LED hybrid lights and solar powered LED lights.

LEDioc

Global environmental issues have become a significant challenge to all mankind. IWASAKI ELECTRIC Co., Ltd. are promoting LED lighting as one countermeasure to these issues. The energy saving, resource saving and environmental protection features of LEDioc points the way towards a sustainable society.

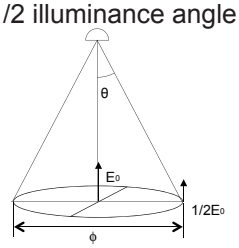


contents

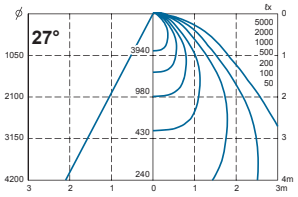
10 Illuminance distribution diagram (reference)

* The figures in the diagram indicate initial horizontal illuminance (unit: ℓx)

1/2 illuminance angle and Direct horizontal illuminance

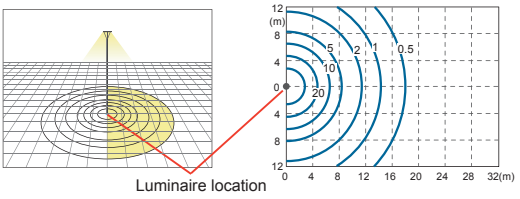


1/2 illuminance angle indicates the spread of light by the angle (Θ) formed by a line from the luminaire to the area directly below it and a line that connects the luminaire and the point that is half the horizontal illuminance (E_0) of the horizontal illumnance below the luminaire.

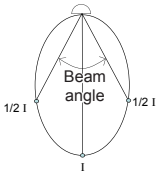


Direct horizontal illuminance data indicates the range within which the horizontal illuminance expressed by the curves can be obtained using the distance from the luminaire along the vertical axis and the horizontal distance from a point directly underneath the luminaire along the horizontal axis.
* The maintenance factor is 1.0.

Illuminance distribution



Beam angle



Beam angle, an indicator that tells you how far the light will distribute, indicates the angle between the two directions opposed to each other over the beam axis where the luminous intensity is half that of the maximum luminous intensity (I).

How to use this catalog

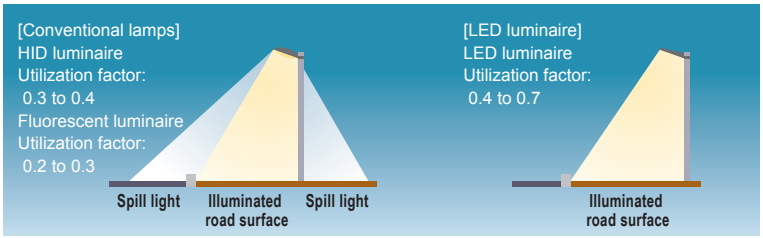
The products we make are designed and manufactured with special consideration for functionality and safety, however, a product that is not used as intended could cause an accident. Therefore, please read through the safety precautions in the catalog when you select a product and read the instruction manual supplied with the product to ensure that you select a product that will operate safely in the application and environment where it will be used.

What LEDioc can do
Lighting for the Future

Minimize spilled light affecting homes or nearby facilities while maximizing light reaching the road surface.

High lighting efficacy

The incident light efficacy that a road surface is subject to is an important factor in an outdoor luminaire since there are no ceilings and walls. LED are highly directional and light distribution is therefore easy to control so that only the area of the road that needs to be lit is illuminated. Unlike mercury lamps and fluorescent lamps, lighting efficacy (utilization factor) can be increased while reducing power consumption (less CO_2 emissions).

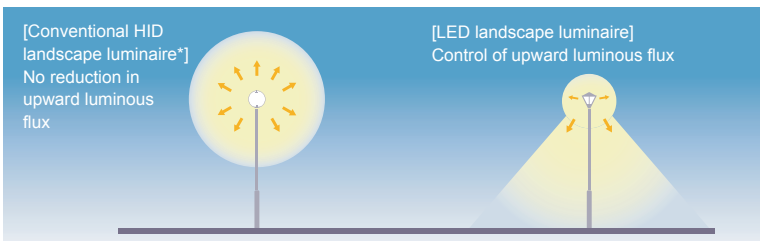


* The utilization figures listed above are only estimates and vary with each product.

Reduce uplight to prevent spilled light affecting the environment and adjacent facilities.

Controlling upward luminous flux ratio

Upward movement of light is controlled to prevent spill light from adversely affecting the environment and surrounding homes. Many products come with high-performance mirrors and lenses to maximize LED performance by accurately and efficiently controlling the distribution of light.

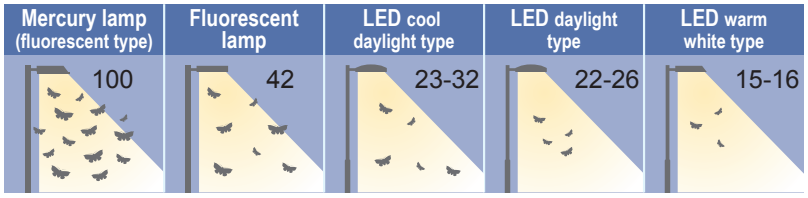


* Round clear globe landscape luminaire.

Luminous flux that moves horizontally upward from the luminaire.
The figures indicate its ratio (%).

Control attraction of insects.

- **Little light output in the ultraviolet region** (reduces the number of insects that are attracted)
  By reducing output of ultraviolet light, LEDioc is far better than mercury lamps and fluorescent lamps at limiting the number of insects that are attracted, which is beneficial for the surrounding ecosystem.



* An LED's propensity to attract insects differ with the type of LED the luminaire or lamp uses.
* The surrounding lighting environment also plays a part in attracting insects. The presence of surrounding light sources that strongly attract insects will negate the insect-repelling characteristics of our LEDs. For maximum effect, installation of separate luminaires for insect attraction is recommended.

Reduce maintenance costs to streamline business operations.

- **Long life**
  Advancements in thermal design technology have made it possible to move heat that is detrimental to LED module life away from the light source and thereby extend LED life to 40,000hours or more. Like the LED module, the heat generated by the power supply unit that supplies the LED with power has also been duly considered giving it the same long life as the LED module.

Since the light does not quickly become bright, it stays on longer than intended.

- **Reaches full brightness as soon as you turn on the switch**
  The light goes on and quickly reaches full brightness with no waiting. Since repeated turning on and off happens instantly the light allows accurate control that reduces waste of light and lowers power consumption (less CO_2 emissions).

Low temperature regions require stable lighting.

- **The luminous flux does not decrease when used in low-temperature regions.**
  Unlike fluorescent lamps, LED usability is not impaired in low temperature regions since they do not become dark when temperatures drop.

* A low temperature region refers to an area where the ambient temperature drops to around –5°C.
* Low temperature types and some outdoor luminaires can be used even down to –20°C or –40°C.

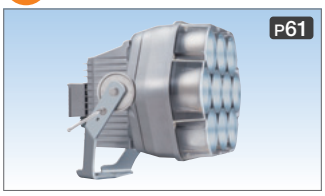
Environmentally friendly features.

- **Contains no hazardous substances**
  LEDs are environmentally friendly as they do not contain mercury or other hazardous substances like mercury lamps and fluorescent lamps.

LEDioc Series shines anywhere

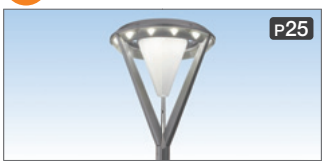
The LEDioc series comes in a lineup that covers the gamut of lighting from road lighting, landscape lighting, flood lighting and other outdoor lighting to indoor lighting such as downlighting.
Compared to conventional lighting fixtures, the LEDioc series with its large energy savings and lower CO_2 emissions will set the standard for future lighting.

1 LEDioc FLOOD BLITZ

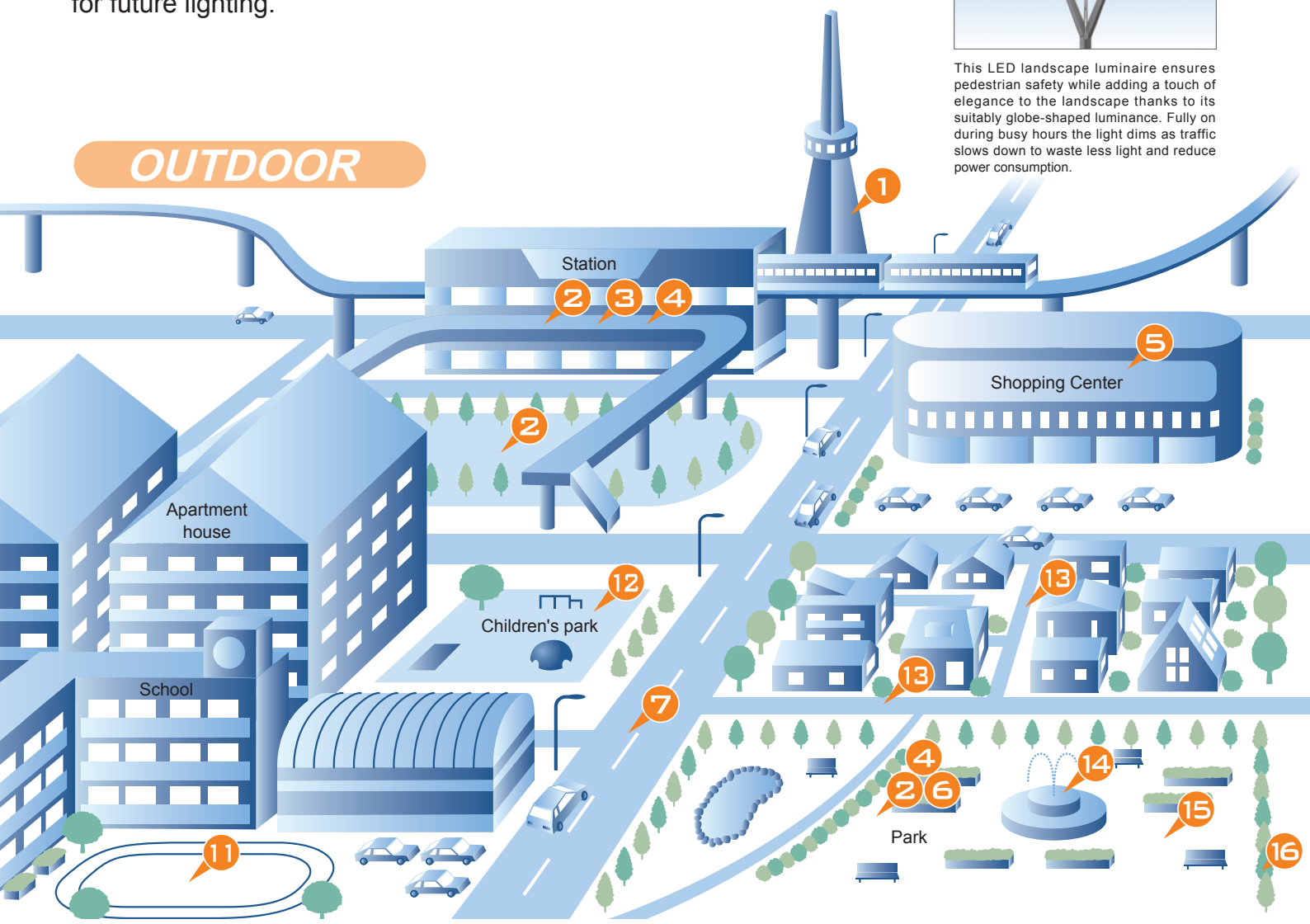


Capable of remotely illuminating large structures like bridges and symbolic towers, LEDioc FLOOD BLITZ also contributes to reduced power consumption (lowering CO_2 emissions).

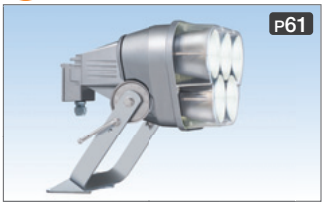
2 LEDioc AREA TYPE G



This LED landscape luminaire ensures pedestrian safety while adding a touch of elegance to the landscape thanks to its suitably globe-shaped luminance. Fully on during busy hours the light dims as traffic slows down to waste less light and reduce power consumption.



11 LEDioc FLOOD BLITZ



Provides high-powered light for illuminating school yards, parking areas and other wide spaces, which substantially lowers power consumption while the long life of the lamp reduces maintenance costs such as lamp replacement.

12 LEDioc LED LIGHT BULB

This LED lamp can replace lamps in existing luminaires (in parks, etc.) if the ballast is also replaced. The lineup includes a 72W and a 30W type, which provide the brightness of a 200W and a 100W mercury lamp, respectively.

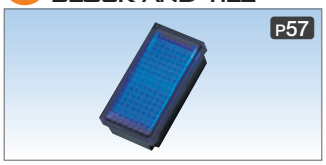
13 LEDioc STREET

The LEDioc STREET comes in three types: the 40VA type, the 20VA type and the 10VA type, which are designed to replace 100W mercury lamps, luminaires comprising two 20W fluorescent lamps and those comprising single 20W fluorescent tubes, respectively. Each of the new lamps lowers electricity costs by between 1 to 3 ranks.

14 LEDioc UNDERWATER LUMINAIRES

Offered in three different light distribution variations of narrow, medium and wide and two light colors of daylight and warm white color, the high-output LEDioc underwater luminaire boasts the industry's highest level of brightness (equivalent to a 250W halogen lamp). Corrosion resistant materials and paint ensure high corrosion resistance and long-term stable quality.

3 SOLAR LED BLOCK AND TILE



These products store electrical energy generated from sunlight in an electrical double layer capacitor to light LEDs without the need for either wiring or conductors. It is the ideal energy source for accent lighting on building exteriors, station squares and other locations.

5 LEDioc FLOOD NEO

The compact and high-powered LEDioc FLOOD NEO series is the perfect choice for illuminating billboards and smaller parking lots. A lineup consisting of 95W, 50W and 35W lamps enables selection of the brightness that best suits your requirements.

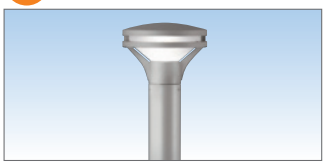
7 LEDioc ROAD

Complying with the Standard for Installing Road Lighting Systems, LEDioc ROAD provides the ideal lighting source for any road or street from major arterial roads and other national roads to local roads. The lineup also includes illumination for intersections to provide a favorable visual environment that contributes to traffic safety.

9 LEDioc CEILING HB

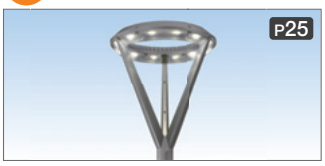
Achieving the same illumination levels as a 400W HID, LEDioc CEILING HB is the best choice for lighting outdoor facilities such as gas station. Available in three light distribution characteristics - narrow, medium and wide beam, a luminaire for virtually any location and illuminance requirement can be provided.

4 LEDioc APPROACH TYPE D



An LED Approach light with a simple circular design that blends into any environment. This series includes an omnidirectional distribution type for use in parks and other open spaces and a unidirectional distribution type that suppresses light to the rear making it suitable for lighting passages.

6 LEDioc AREA TYPE D



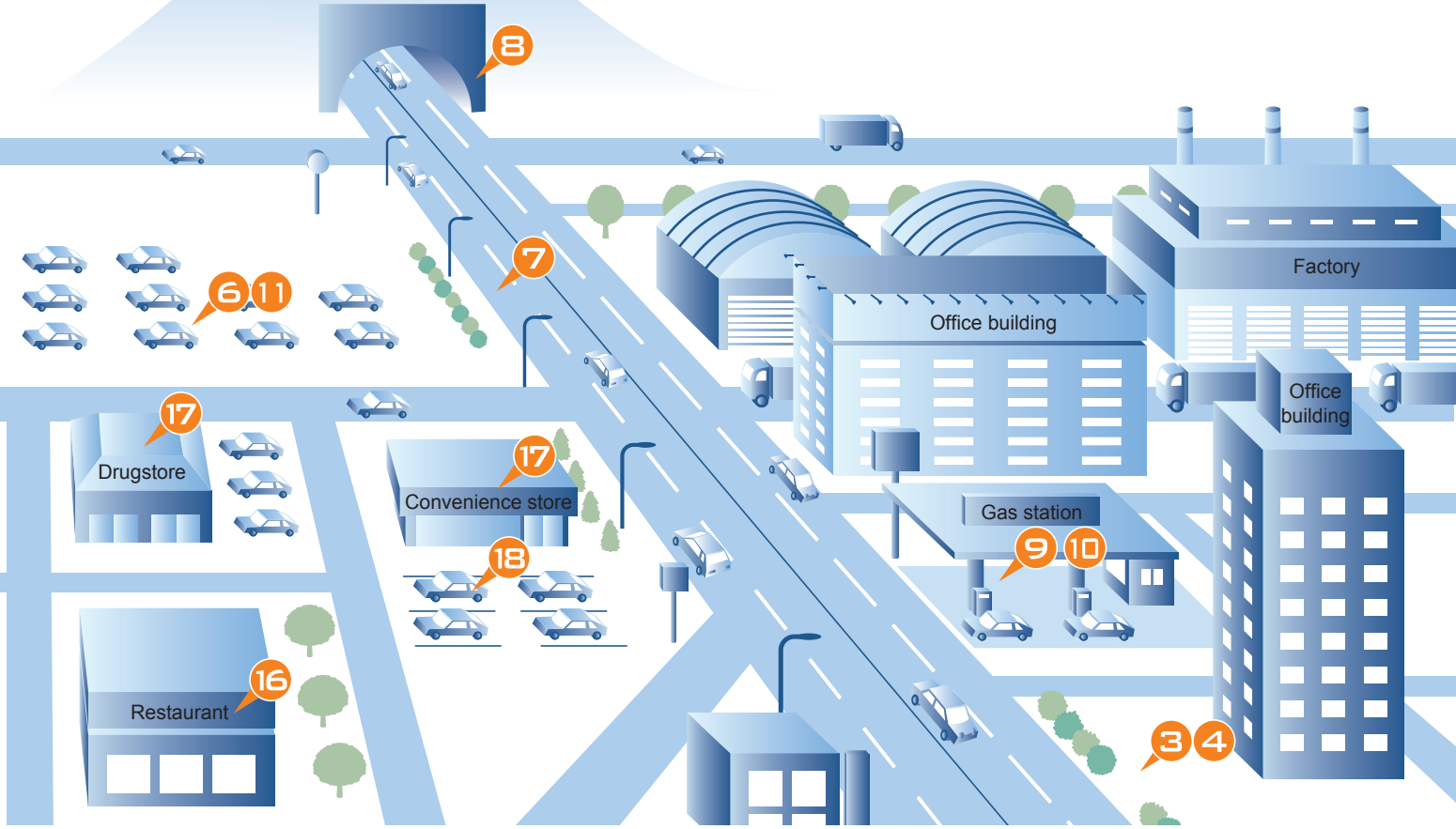
An LED landscape luminaire that has a brightness equivalent to a 400W (250W) mercury lamp. The lineup allows you to select a wide-span type for all round light distribution and a high-efficacy type for effective road surface illuminance.

8 LEDioc TUNNEL

Complying with the Standard for Installing Road Lighting Systems, this LED luminaire can be used for lighting tunnels both on national and local roads. Our unique heat sink configuration extends LED life to up to 90,000hours, which reduces maintenance costs.

10 LEDioc CEILING HB (AREA LIGHT)

We also offer an area light (yard light) lineup with the same design as our ceiling luminaires. They come in a design that harmonizes with service station facilities.



15 Eyebird

Since electricity generated from natural energy such as wind and solar energy charges the battery and power the LED luminaire, there are no electricity costs and the installation is friendly to the environment. Without the need for commercial power, the light will go on at night even when life lines are severed, which is an advantage when the lights are in a park selected as a refuge in the event of a disaster.

16 LEDioc FLOOD NINO

FLOOD NINO is an outdoor spotlight that provides the same brightness as outdoor spotlights using 75W halogen lamps and despite its 6cm diameter compact body contains its own integral power supply unit. Designed for landscape lighting, the luminaire illuminates small billboards, structures and a wide variety of outdoor objects.

17 LEDioc LED EYE LAMPS (52W, 18W)

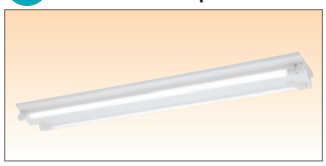
The lamp is enclosed in an all-resin housing made entirely from polycarbonate resin, a thermal conduction material that makes for a lightweight device. It is the ideal choice for illuminating outdoor billboards, smaller parking lots and a wide variety of other applications.

18 LEDioc LED EYE SENSOR SYSTEM

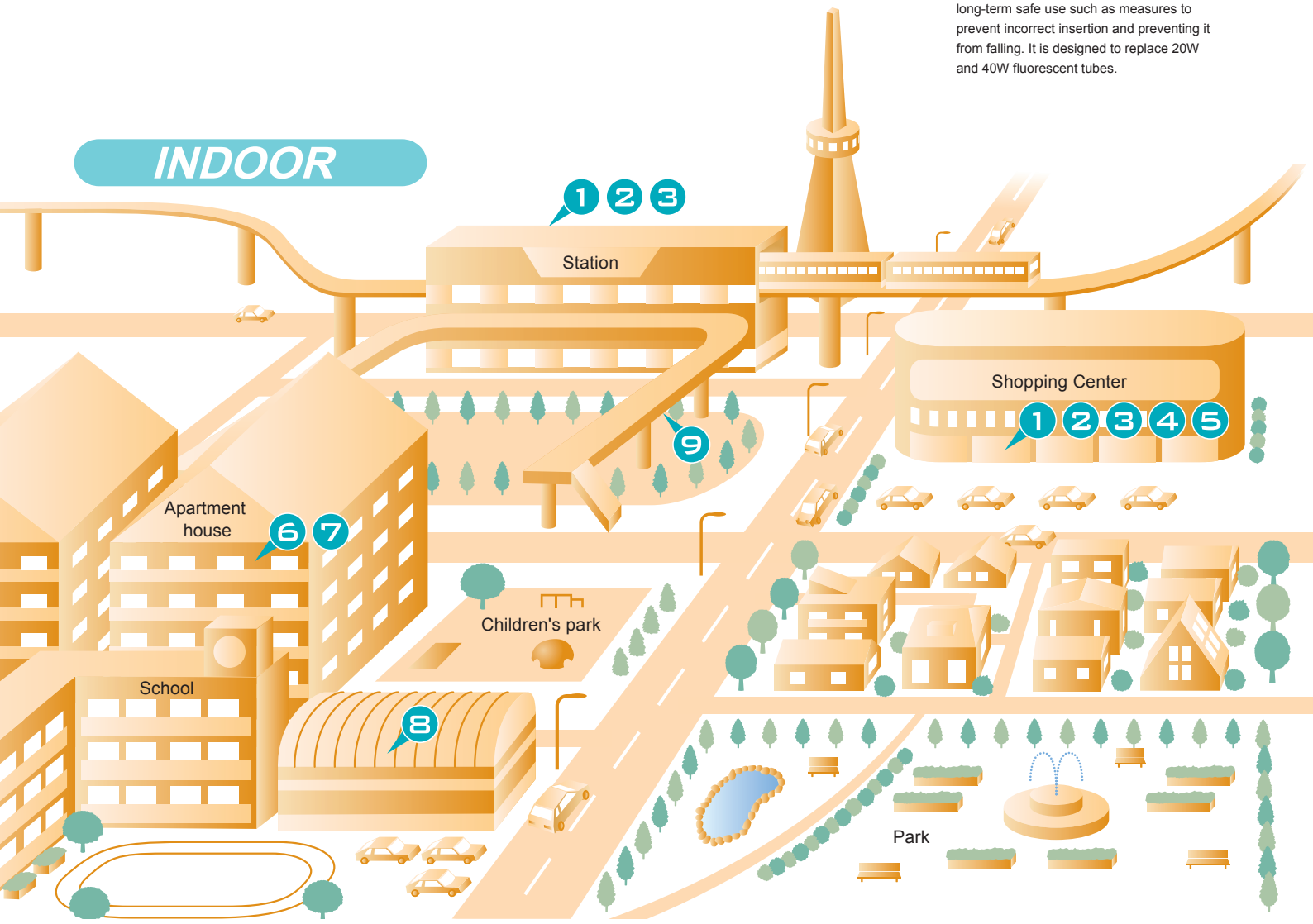
It features a "safe energy-saving mode" that increases light intensity when sensing the presence of people or cars, and a dimming control system with a "safe security mode" that flashes to warn of dangers. Our goal is to combine dimmable LED luminaires with people detection (infrared light) sensors to reduce waste of light and electricity.

LEDioc Series shines anywhere

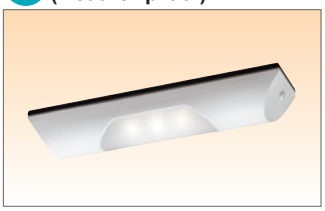
1 LEDioc Linear LED lamp luminaire



Complying with the JEL standard, this luminaire for linear LED lamps have a number of safety features to guarantee long-term safe use such as measures to prevent incorrect insertion and preventing it from falling. It is designed to replace 20W and 40W fluorescent tubes.

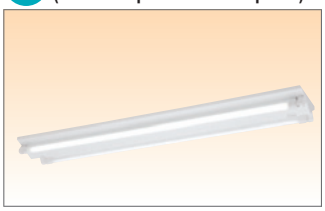


6 LEDioc CEILING Ⅱ (weather-proof)



Intended to replace 20W and 10W fluorescent lamps, this semi-outdoor luminaire is ideal for lighting shared spaces in apartment houses (stairways, passages and bicycle parking areas), bus shelters and underground passages. Its long life of 60,000hours reduces costs arising from lamp replacement and other maintenance.

7 LEDioc Linear LED lamp luminaire (moisture-proof/weather-proof)



A luminaire for Linear LED lamps that can be used under the eaves and other locations exposed to rain as well as in kitchens, dressing rooms, lavatories and other moisture-rich locations.

8 LEDioc CEILING HIGH-BAY Λ (LAMBDA)

P77

A rated luminous flux of 24,000ℓm (wide) and 23,500ℓm (medium) and a high-output that exceeds 400W metal halide lamps makes it the LED luminaire of choice for installation in facilities with high ceilings like gymnasiums, factories and warehouses. Standard features such as initial luminous flux correction and dimming control ensure further energy savings.

9 LEDioc Under-eaves LED Downlight

P100

This downlight produces a brightness that ranges from a 40W incandescent light bulb to a 70W ceramic metal halide lamp. It is the ideal under-eaves luminaire for pedestrian decks, entrances to commercial establishments and other locations exposed to outdoor air.

2 LEDioc LED Downlight

A wide range of models capable of providing brightness from a 40W incandescent lamp to a 150W ceramic metal halide lamp makes them suitable for general lighting in commercial establishments and a great variety of installations.

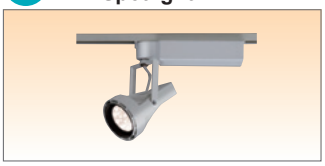
3 LED Emergency Exit Light

Use of LEDs in evacuation lighting that leads people to safety in the event of an emergency cuts energy consumption and their long life contributes to reducing maintenance costs.

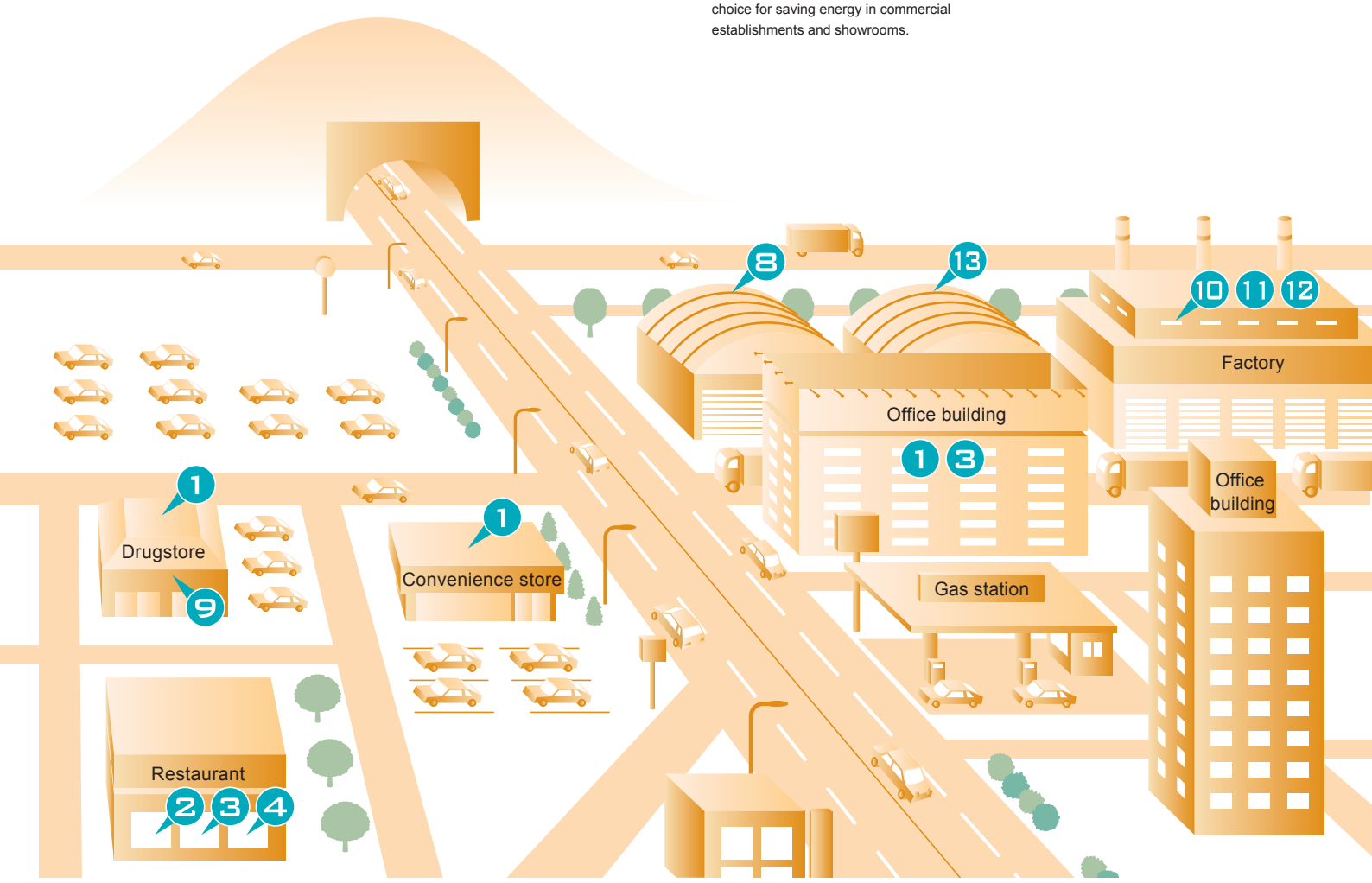
4 LEDioc LED EYE Lamp (halogen lamp)

Provided in an E11 socket base, this LED lamp uses dichroic mirrors. The lineup consists of three light colors: warm white, cool white and neodymium color. Our EYE lamp produces the same brightness as a 30W (50W) JDR halogen lamp at a power consumption of 5W. This lamp is the perfect choice for saving energy in commercial establishments and showrooms.

5 LEDioc LED Spotlight



This LED spotlight and power supply unit is intended for lighting rail installation and achieves a brightness that ranges from 50W halogen lamps and up to 70W ceramic metal halide lamps. It can be used as a spotlight in commercial and other facilities.



10 LEDioc Explosion-proof LED luminaire

This LED luminaire can be delivered in a number of different mount options including ceiling mount, bracket or stand to suit a broad range of applications. Achieving a brightness equal to a 200W incandescent bulb and compliance with explosion-proof class of Exde II CT5 authorizes its use in hazardous zone category 1.

11 LEDioc Explosion-proof LED evacuation lighting

This explosion-proof LED evacuating light (explosion-proof class Exde II BT5) is powered by a nickel-hydride battery. Compared to a cold cathode lamp, it is roughly 62% more energy-conscious and thanks to an LED module with a 60,000-hour life, it will also reduce maintenance costs.

12 LEDioc Increased safety LED luminaire

Increased safety LED luminaire (explosion-proof class ed3aG3) that has a brightness of two 40W fluorescent tubes. This luminaire is compact - only 400mm long - just 1/3 the size of an equivalent fluorescent tube and as it replaces a dual installation with a single installation it also simplifies replacement work.

13 LEDioc CEILING low temperature type

A LED luminaire capable of withstanding temperatures in a range between -40°C to +35°C allows it to light freezers and refrigerated warehouses. The luminaire is offered in three types: Positioning box, pendant or ceiling mount (laceway mount) installation. A long life of 60,000hours reduces maintenance costs as fewer lamp replacements will be needed.

LEDioc LED Light Bulbs

72W and 30W

Replacement of lamps and ballasts enable continued use of existing luminaire*.

High-efficacy LED lamp that spreads light in every direction.

* Existing luminaire should be inspected when use of existing luminaire will be continued.

- The 72W type has a lamp luminous flux of 8,000ℓm (111ℓm/W) and when substituted for a 200W mercury lamp, it will provide about the same brightness at a slightly lower total luminous flux.
- The 30W type has a lamp luminous flux of 4,000ℓm (133ℓm/W) and will provide the same brightness when substituted for a 100W mercury lamp.

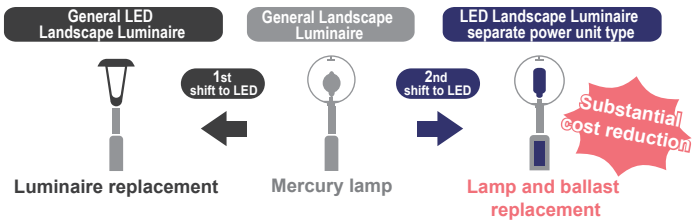
72W type (E40 base type)

30W type (E27 base type)

Enables use of existing luminaires

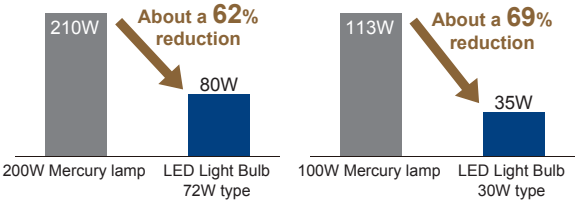
Initial costs are low since only the existing lamp and ballast need to be replaced.

Note: Existing luminaire should be inspected during upgrades when use of existing luminaire will be continued.



Saving energy

Far more energy efficient than mercury lamps, LEDioc reduces running costs.



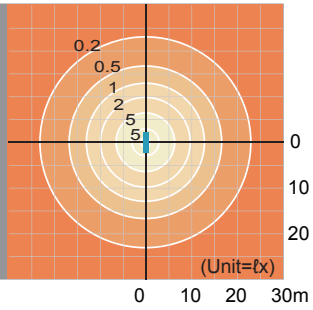
* The power consumption noted above is characteristic when used with a 200V power supply.

Same overall light distribution like an HID lamp

With our proprietary lamp configuration LED lamps provide an evenly distributed overall beam and have a brightness and general feel that few will notice when they replace HID lamps and other conventional lamps.

Mercury Lamp 200W
Luminaire type: HG5011C

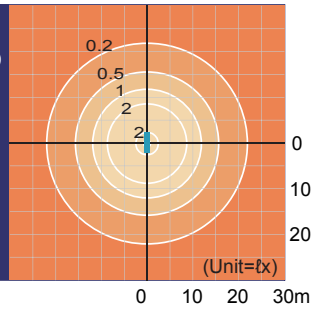
- Luminous flux: 9,900ℓm
- Maintenance factor: 0.69
- Lamp height: 4.8m



0.5ℓx Same as 0.5ℓx

LEDioc LED Light Bulb 72W
Luminaire type: HG5011C

- Luminous flux: 8,000ℓm
- Maintenance factor: 0.60
- Lamp height: 4.8m

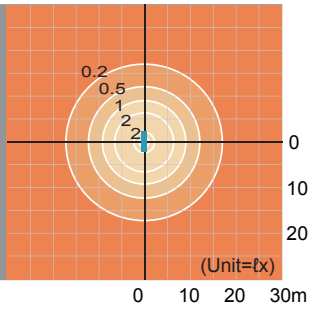


Mercury Lamp 200W

LED Light Bulb 72W

Mercury Lamp 100W
Luminaire type: HG3011C

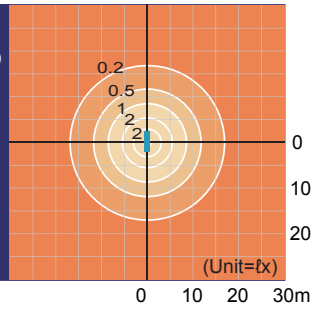
- Luminous flux: 4,200ℓm
- Maintenance factor: 0.69
- Lamp height: 4.8m



0.5ℓx Same as 0.5ℓx

LEDioc LED Light Bulb 30W
Luminaire type: HG3011C

- Luminous flux: 4,000ℓm
- Maintenance factor: 0.60
- Lamp height: 4.8m



Mercury Lamp 100W

LED Light Bulb 30W

The industry's lightest

Our 30W LED lamp is the industry's lightest* weighing in at 290g, which lowers the wear and tear of luminaires.
The 72W lamp weighs only 460g even with a full set of safety features.

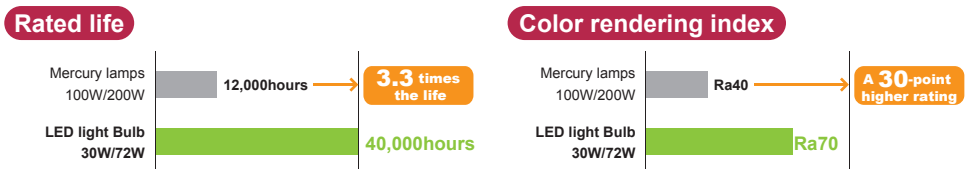
* According to our survey of June 1, 2012

The brightest in the industry

Luminous flux: The use of high efficacy LED modules make our LED light bulbs the industry's brightest in each watt class, as our specifications prove: 30W LED lamp provides 4,000ℓm (133ℓm/W) and our 72W lamp provides 8,000ℓm (111ℓm/W).

Long life and high color rendering

Highly efficient disposal of heat generated by LEDs have raised their rated life to 40,000hours. This makes them easier to maintain than mercury lamps. LED lamps produce a light with a more natural color than mercury lamps as their color rendering index of Ra70 compared to Ra40 for mercury lamps indicate.



Will work in a wide variety of environments and support a wide range of working voltages

- Operating temperature: A wide operating temperature range from –20°C to +40°C permit use in cold climates.
- Operating voltage: 100 to 242V enables operation virtually anywhere.

Comparison example

200W mercury lamp (HF200X)
LEDioc LED Light Bulb 72W (LDTS-C200N)

Power consumption*1
210W
80W
An energy saving of roughly 62%

Annual amount of CO_2 emissions*2
About 361kg of CO_2
About 138kg of CO_2
About a 223kg reduction in CO_2

Lifetime
12,000hours
40,000hours
About 3.3 times

*1 Indicates characteristics for a mercury lamp with a power supply voltage of 200V
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

100W mercury lamp (HF100X)
LEDioc LED Light Bulb 30W (LDTS-C100N)

Power consumption*1
120W
34W
An energy saving of roughly 72%

Annual amount of CO_2 emissions*2
About 206kg of CO_2
About 59kg of CO_2
About a 147kg reduction in CO_2

Lifetime
12,000hours
40,000hours
About 3.3 times

*1 Indicates characteristics for a mercury lamp with a power supply voltage of 100V
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

 * Above illuminance diagram indicates initial values (unit: ℓx).

LDTS-C200N

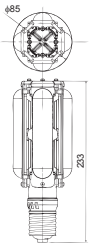
(Lamp: LDTS72N-G + Power supply: LE072044HS1/24-A1)
(100 to 242V, 50/60 Hz)

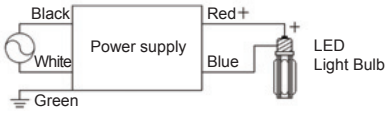
Total luminous flux	Power Consumption	Rated life
8,000ℓm	79W (100V) 80W (200V)	40,000hours

Light Color	Color Rendering Index (Ra)
Equivalent to 5,000K (Daylight)	70

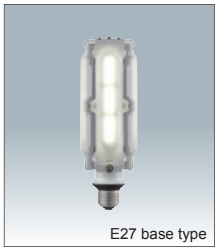
Specifications

Body: Diecast aluminum
Globe: Polycarbonate
Finish color: White paint
Ambient operating temperature range: -20°C to +40°C
Weight: 460g





LED light bulbs are DC powered. Connect to the power supply so that the eyelet (top) of the lamp is +. (Connecting it in reverse will not destroy the lamp, but it will not turn on.)



LDTS-C100N

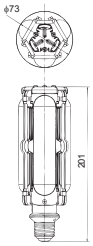
(Lamp: LDTS30N-GA + Power supply: LE030025HS1/24-A1)
(100 to 242V, 50/60 Hz)

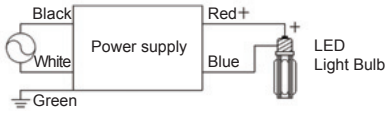
Total luminous flux	Power Consumption	Rated life
4,000ℓm	34W (100V) 35W (200V)	40,000hours

Light Color	Color Rendering Index (Ra)
Equivalent to 5,000K (Daylight)	70

Specifications

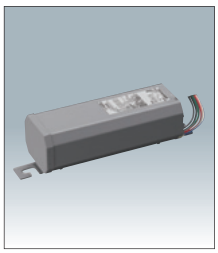
Body: Diecast aluminum
Globe: Polycarbonate
Finish color: White paint
Ambient operating temperature range: -20°C to +40°C
Weight: 290g





LED light bulbs are DC powered. Connect to the power supply so that the eyelet (top) of the lamp is +. (Connecting it in reverse will not destroy the lamp, but it will not turn on.)

Power supply unit



For 72W

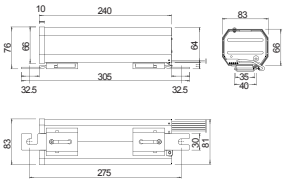
LE072044HS1/24-A1

(100 to 242V, 50/60 Hz)

For 30W

LE030025HS1/24-A1

(100 to 242V, 50/60 Hz)
Body: Steel plate
Lead wire: 0.8m
Applicable pole:
Insertable pole ϕ130.8 (4B) or larger
Weight: 2.5kg
Ambient operating temperature range: -20°C to +40°C



Main applicable luminaire — Weather-proof landscape luminaire (pole top/pendant type)

- Compatible luminaires are general weather-proof landscape luminaires.
- Cannot be used with luminaires that are small and airtight or those that shine downwards, such as downlights or those with shades.
- When used for luminaires that control light distribution, such as streetlights or security lights, it may not meet installation standards.
- Use an LED light bulb with perpendicular lighting fixtures.
- To continue using existing equipment it should be inspected and modified as necessary.

LEDioc ROAD

400/300/250 SERIES

A long-life and energy-saving solution, our LED streetlight also has excellent safety and maintenance credentials.

- Reduces CO_2 emissions by 73% or more than mercury lamps and 56% or more than high-pressure sodium lamps.
- Lamp life of 60,000hours. Long life substantially cuts maintenance costs. Maintains constant luminous flux over the complete service life.
- Multiple safety features
  Dual line operation function and soft-start function make life easier and safer for drivers and pedestrians.

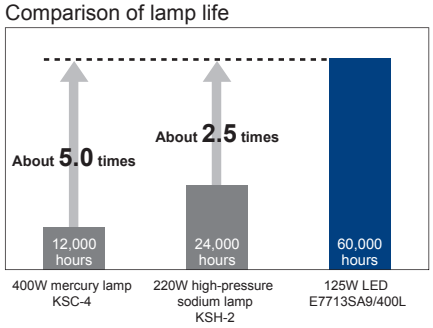
Great Energy-saving Effect

Initial luminous flux correction increases LED life to 60,000hours while having an average power consumption of 125W (at 200V), which is about 73% of the power consumed by a 400W mercury lamp and 56% of the power consumed by a 220W high-pressure sodium lamp.

A long life reduces maintenance costs

A 60,000-hour life dramatically lowers maintenance costs (70% lumen maintenance).

Comparison of lamp life



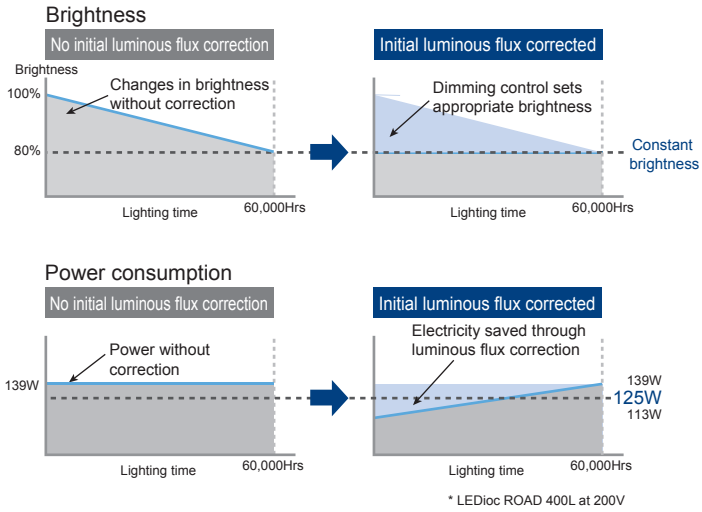
1/2 dimming function

A step dimming function helps lower power costs and CO_2 emissions for further energy saving late at night or at other times when traffic volumes drop. When the dimming signal line of the LED module control device (power supply unit) receives voltage (200V AC) externally the light is dimmed by 50%.

* Only the E7713SA9/400L/D, the E7113SA9/400L/D come with the step dimming function.

Initial luminous flux correction (function for maintaining a constant brightness)

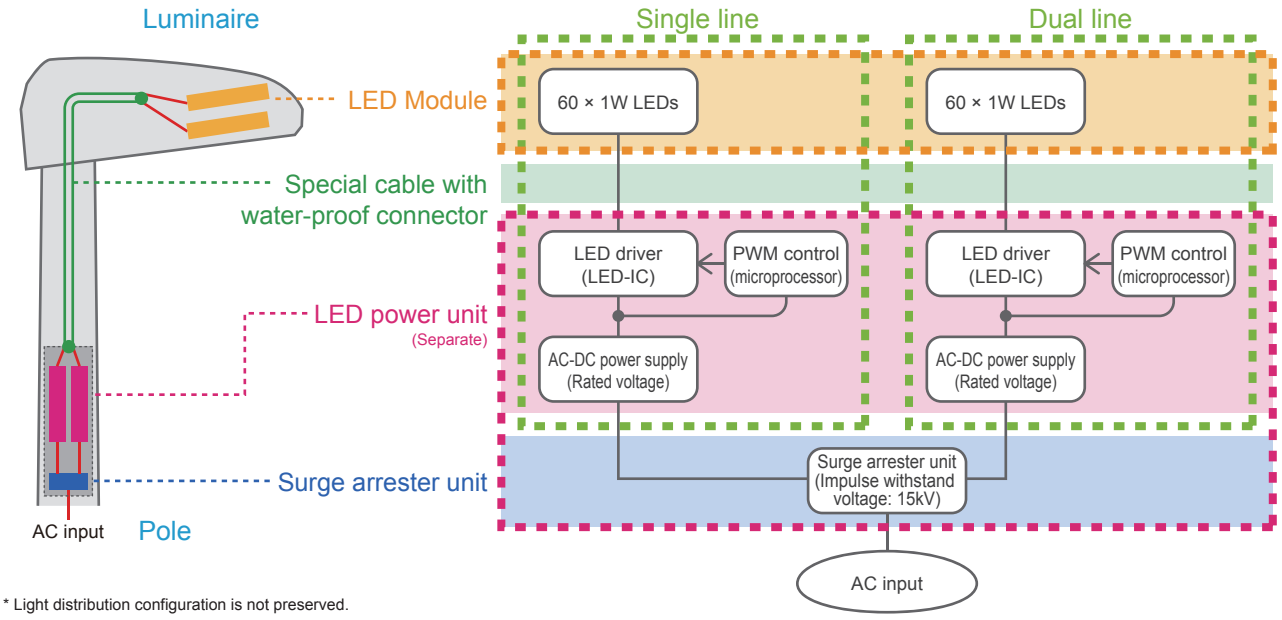
Current control provided by the microprocessor incorporated in the power supply makes sure that brightness is maintained at a constant level from initial lighting until end of LED life. In this way, excessive brightness is suppressed out of consideration for the maintenance factor, which lowers power consumption.



* LEDioc ROAD 400L at 200V

Dual line operation function

The circuits in LEDioc ROAD are configured as dual line so if one line breaks down the remaining line will provide half the brightness.*



* Light distribution configuration is not preserved.

Safety design

Luminaire body and power supply unit come with safety features designed to protect it from external electrical and physical impact.

Lightning and surge protection voltage: 15kV

The luminaire has been designed to withstand outdoor surges and has a lightning and surge protection voltage of 15kV. (common mode)

Safety wire

A safety wire is provided as standard to prevent the luminaire from falling should it be separated from the pole due to an external cause.

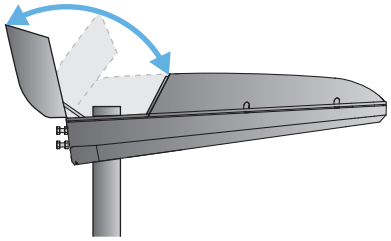
* This requires an installation on the pole.

Soft - start function (a gradual increase in voltage during startup)

Unlike HID light sources, LEDs reach 100% brightness instantly. To ensure that this sudden change in brightness does not physically impact the driver, a microprocessor in the luminaire provides a soft-start function that controls current so that the LED reaches full brightness in 10 seconds.

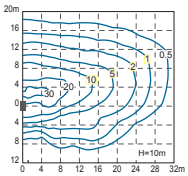
Easy of maintenance

The luminaire body has been designed for greater ease of installation and maintenance. The new design of the luminaire body features openings that are compact yet open wide to simplify installation and wiring work.



Cold climate resistant and improved ease of installation

Special cables with water-proof connectors make it easier to connect the LED module and the power unit. Cold climate resistance has also been improved by lowering the ambient operating temperature from −20°C to 35°C (−20°C to 40°C for our power supply unit).



Continuous illumination | Straight pole type | Semi cutoff

With initial luminous flux correction | Weather-proof

E7713SA9/400L

(Luminaire: E7713-0 + power supply unit: WLE180V360M2C1/24-1)
(100 to 242V, 50/60Hz)

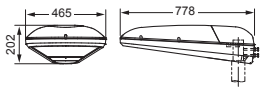
Rated luminous flux (luminaire luminous flux)	Power consumption
11,500ℓm	128W (100V) 125W (200V)

Luminous efficacy	LED module life
89.8ℓm/W (100V) 92.0ℓm/W (200V)	60,000hours

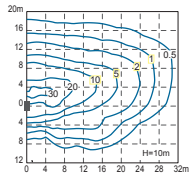
Light color	Color rendering index (Ra)
Equivalent to 5,700K (Cool daylight)	70

Specifications

Body: Diecast aluminum
Globe: Tempered glass
Finish color: Metallic silver
Pole inserted dimension: ϕ60.5 (2B) × 120mm
Power supply unit: WLE180V360M2C1/24-1
Weight: 14.9kg



0%



Continuous illumination | Straight pole type | Semi cutoff

With initial luminous flux correction+1/2 dimming function

Weather-proof

E7713SA9/400L/D

(Luminaire: E7713-0 + power supply unit: WLE180V360M2C1/24-2)
(100 to 242V, 50/60Hz)

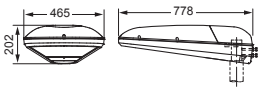
Rated luminous flux (luminaire luminous flux)	Power consumption
11,500ℓm	128W (100V) 125W (200V)

Luminous efficacy	LED module life
89.8ℓm/W (100V) 92.0ℓm/W (200V)	60,000hours

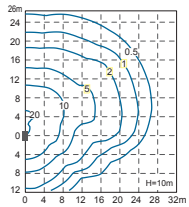
Light color	Color rendering index (Ra)
Equivalent to 5,700K (Cool daylight)	70

Specifications

Body: Diecast aluminum
Globe: Tempered glass
Finish color: Metallic silver
Pole inserted dimension: ϕ60.5 (2B) × 120mm
Power supply unit: WLE180V360M2C1/24-2
Weight: 14.9kg



0%



Continuous illumination | Straight pole type | Semi cutoff

With initial luminous flux correction | Weather-proof

E7714SA9/400C

(Luminaire: E7714-0 + power supply unit: WLE180V360M2C1/24-1)
(100 to 242V, 50/60Hz)

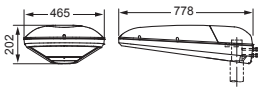
Rated luminous flux (luminaire luminous flux)	Power consumption
10,770ℓm	128W (100V) 125W (200V)

Luminous efficacy	LED module life
84.1ℓm/W (100V) 86.1ℓm/W (200V)	60,000hours

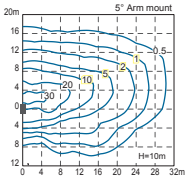
Light color	Color rendering index (Ra)
Equivalent to 5,700K (Cool daylight)	70

Specifications

Body: Diecast aluminum
Globe: Tempered glass
Finish color: Metallic silver
Pole inserted dimension: ϕ60.5 (2B) × 120mm
Power supply unit: WLE180V360M2C1/24-1
Weight: 14.9kg



0%



Continuous illumination | Arm type | Semi cutoff

With initial luminous flux correction | Weather-proof

E7113SA9/400L

(Luminaire: E7113-0 + power supply unit: WLE180V360M2C1/24-1)
(100 to 242V, 50/60Hz)

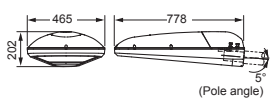
Rated luminous flux (luminaire luminous flux)	Power consumption
11,500ℓm	128W (100V) 125W (200V)

Luminous efficacy	LED module life
89.8ℓm/W (100V) 92.0ℓm/W (200V)	60,000hours

Light color	Color rendering index (Ra)
Equivalent to 5,700K (Cool daylight)	70

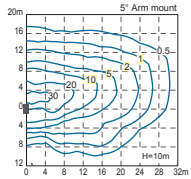
Specifications

Body: Diecast aluminum
Globe: Tempered glass
Finish color: Metallic silver
Arm inserted dimension: ϕ60.5 (2B) × 120mm
Power supply unit: WLE180V360M2C1/24-1
Weight: 14.9kg



(Pole angle)

0%



Continuous illumination | Arm type | Semi cutoff

With initial luminous flux correction+1/2 dimming function

Weather-proof

E7113SA9/400L/D

(Luminaire: E7113-0 + power supply unit: WLE180V360M2C1/24-2)
(100 to 242V, 50/60Hz)

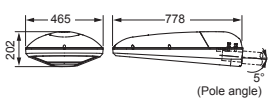
Rated luminous flux (luminaire luminous flux)	Power consumption
11,500ℓm	128W (100V) 125W (200V)

Luminous efficacy	LED module life
89.8ℓm/W (100V) 92.0ℓm/W (200V)	60,000hours

Light color	Color rendering index (Ra)
Equivalent to 5,700K (Cool daylight)	70

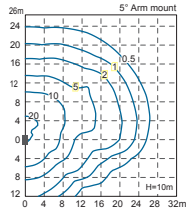
Specifications

Body: Diecast aluminum
Globe: Tempered glass
Finish color: Metallic silver
Arm inserted dimension: ϕ60.5 (2B) ×120mm
Power supply unit: WLE180V360M2C1/24-2
Weight: 14.9kg



(Pole angle)

0%



Continuous illumination | Arm type | Semi cutoff

With initial luminous flux correction | Weather-proof

E7114SA9/400C

(Luminaire: E7114-0 + power supply unit: WLE180V360M2C1/24-1)
(100 to 242V, 50/60Hz)

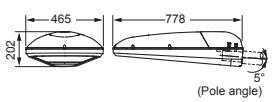
Rated luminous flux (luminaire luminous flux)	Power consumption
10,770ℓm	128W (100V) 125W (200V)

Luminous efficacy	LED module life
84.1ℓm/W (100V) 86.1ℓm/W (200V)	60,000hours

Light color	Color rendering index (Ra)
Equivalent to 5,700K (Cool daylight)	70

Specifications

Body: Diecast aluminum
Globe: Tempered glass
Finish color: Metallic silver
Arm inserted dimension: ϕ60.5 (2B) × 120mm
Power supply unit: WLE180V360M2C1/24-1
Weight: 14.9kg



(Pole angle)

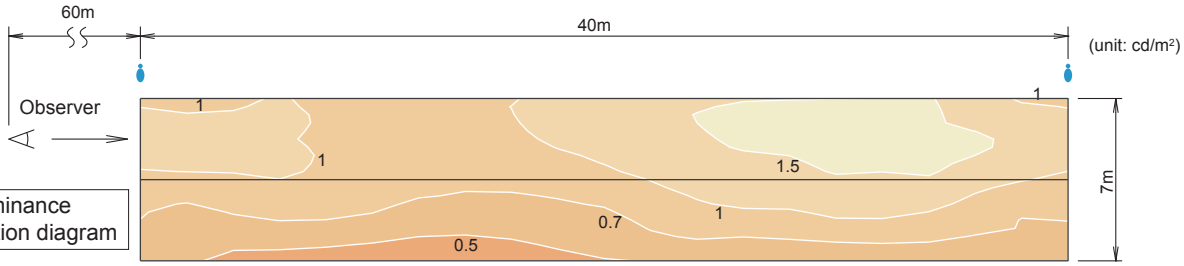
0%

* The horizontal plane illumination distribution diagram above indicates the maintained value (maintenance factor 0.7) (unit:ℓx).
* The above power consumption figures indicate average consumption when initial illuminance correction (80% dimmimg) is used.

Major arterial roads: Average road Luminance: 1.0cd/m²

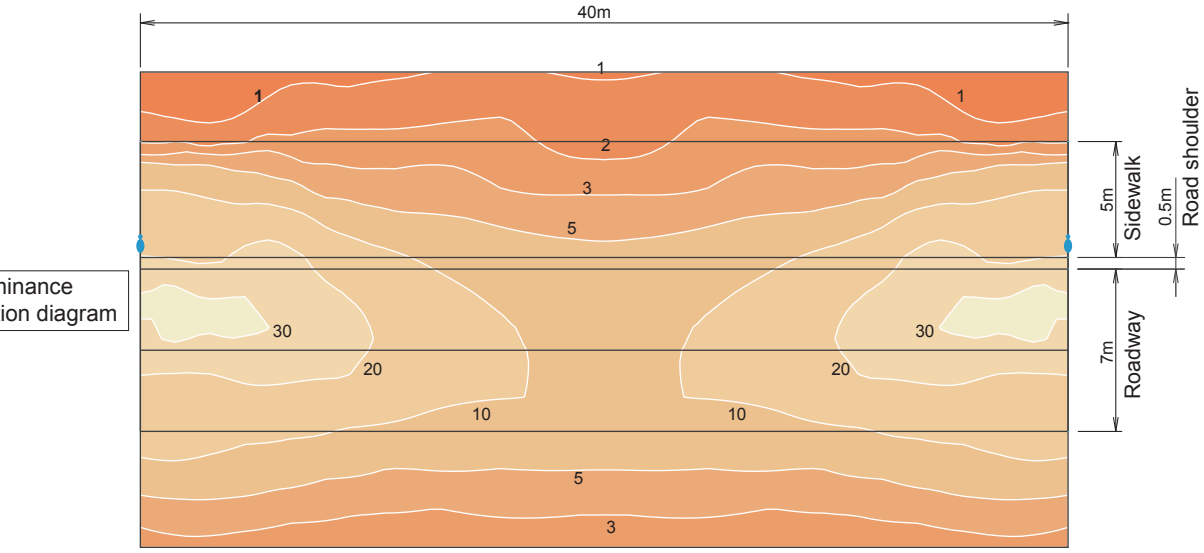
E7713SA9/400L <LEDioc ROAD 400L>
Design conditions: Road width: 7.0m, installation height: 10.0m, installation interval: 40.0m, OH: −1m, maintenance factor: 0.7, asphalt road surface: C2, qo=0.07

Luminance distribution diagram



Average road luminance: 1.09cd/m²
Total uniformity: 0.43
Lane axis uniformity (primary lane): 0.52
Lane axis uniformity (secondary lane): 0.61
Relative threshold increase (glare TI first): 4.5%
Relative threshold increase (glare TI second): 3.6%

Illuminance distribution diagram

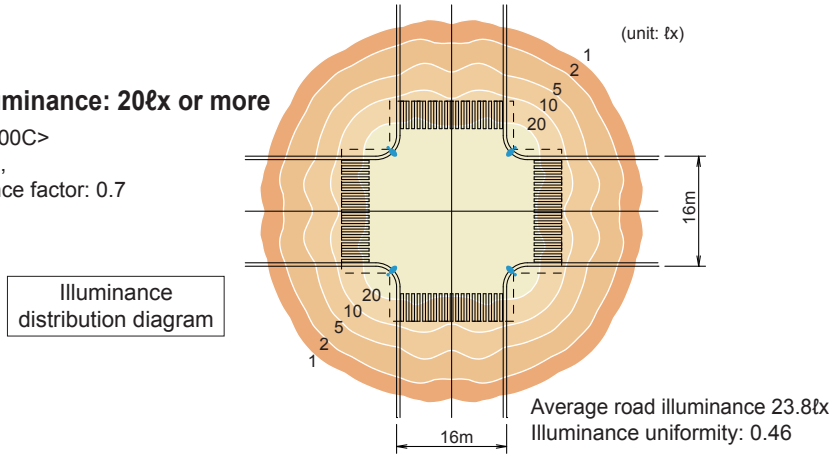


Average road illuminance (roadway): 16.3ℓx
Average road illuminance (sidewalk): 6.2ℓx
Illuminance uniformity (roadway): 0.37
Illuminance uniformity (sidewalk): 0.24

Intersection Average road illuminance: 20ℓx or more

E7714SA9/400C <LEDioc ROAD 400C>
Design conditions: Road width: 7.0m,
installation height: 10.0m, maintenance factor: 0.7

Illuminance distribution diagram



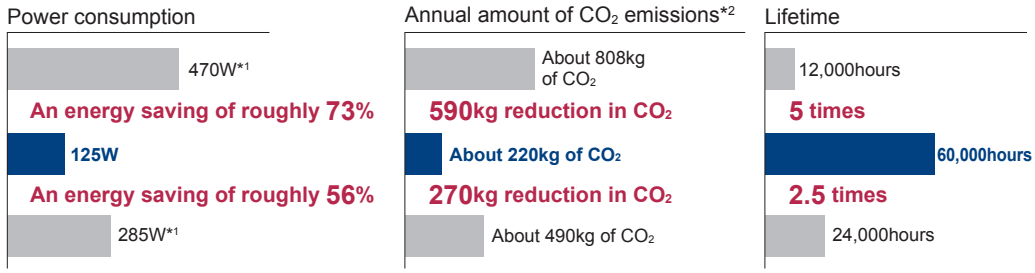
Average road illuminance 23.8ℓx
Illuminance uniformity: 0.46

Comparison example

Mercury lamp for street lighting
(KSC-4/H745)
400W mercury lamp

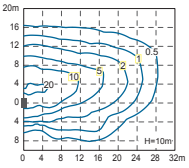
LEDioc ROAD 400L
(E7713SA9/400L)

High-pressure sodium lamp for street lighting
(KSH-2/H7718)
220W high-pressure sodium lamp



*1 Power consumption follows the characteristics of "Road and tunnel luminaire specifications (established 2008) published by the Association of Electricity and Telecommunication Engineering for Land and Infrastructure.
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

LEDioc ROAD 300L (Continuous illumination)



Continuous illumination | Straight pole type | Semi cutoff
With initial luminous flux correction | Weather-proof

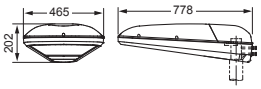
E7713SA9/300L

(Luminaire: E7713-0 + power supply unit: WLE180V220M2C1/24-1)
(100 to 242V, 50/60Hz)

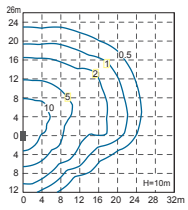
Rated luminous flux (luminaire luminous flux)	Power consumption
7,650ℓm	81W (100V) 80W (200V)
Luminous efficacy	**LED module life**
94.4ℓm/W (100V) 95.6ℓm/W (200V)	60,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 5,700K (Cool daylight)	70

Specifications

Body: Diecast aluminum
Globe: Tempered glass
Finish color: Metallic silver
Pole inserted dimension: ϕ60.5 (2B) × 120mm
Power supply unit: WLE180V220M2C1/24-1
Weight: 14.9kg



LEDioc ROAD 300C (Intersection illumination)



Continuous illumination | Straight pole type | Semi cutoff
With initial luminous flux correction | Weather-proof

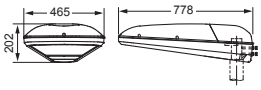
E7714SA9/300C

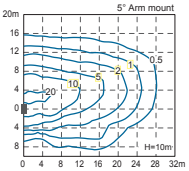
(Luminaire: E7714-0 + power supply unit: WLE180V220M2C1/24-1)
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
7,130ℓm	81W (100V) 80W (200V)
Luminous efficacy	**LED module life**
88.0ℓm/W (100V) 89.1ℓm/W (200V)	60,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 5,700K (Cool daylight)	70

Specifications

Body: Diecast aluminum
Globe: Tempered glass
Finish color: Metallic silver
Pole inserted dimension: ϕ60.5 (2B) × 120mm
Power supply unit: WLE180V220M2C1/24-1
Weight: 14.9kg





Continuous illumination | Arm type | Semi cutoff
With initial luminous flux correction | Weather-proof

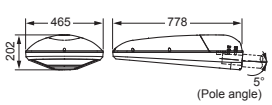
E7113SA9/300L

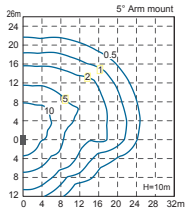
(Luminaire: E7113-0 + power supply unit: WLE180V220M2C1/24-1)
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
7,650ℓm	81W (100V) 80W (200V)
Luminous efficacy	**LED module life**
94.4ℓm/W (100V) 95.6ℓm/W (200V)	60,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 5,700K (Cool daylight)	70

Specifications

Body: Diecast aluminum
Globe: Tempered glass
Finish color: Metallic silver
Arm inserted dimension: ϕ60.5 (2B) × 120mm
Power supply unit: WLE180V220M2C1/24-1
Weight: 14.9kg





Continuous illumination | Arm type | Semi cutoff
With initial luminous flux correction | Weather-proof

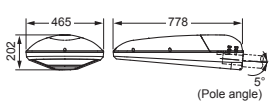
E7114SA9/300C

(Luminaire: E7114-0 + power supply unit: WLE180V220M2C1/24-1)
(100 to 242V, 50/60Hz)

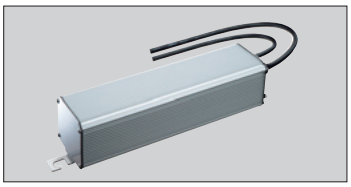
Rated luminous flux (luminaire luminous flux)	Power consumption
7,130ℓm	81W (100V) 80W (200V)
Luminous efficacy	**LED module life**
88.0ℓm/W (100V) 89.1ℓm/W (200V)	60,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 5,700K (Cool daylight)	70

Specifications

Body: Diecast aluminum
Globe: Tempered glass
Finish color: Metallic silver
Arm inserted dimension: ϕ60.5 (2B) × 120mm
Power supply unit: WLE180V220M2C1/24-1
Weight: 14.9kg



Power supply unit



For the 400 series

WLE180V360M2C1/24-1
WLE180V360M2C1/24-2

* With 1/2 dimming function

For the 300 series

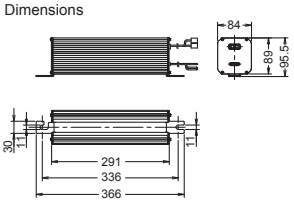
WLE180V220M2C1/24-1

(100 to 242V, 50/60Hz)

15kV surge arrester unit

Body: Aluminum
Weight: 2.4kg
Applicable pole: Insertable pole ϕ130.8 (5B) or larger
Lead wire: 0.8m
Working voltage: 100 to 242V

Dimensions

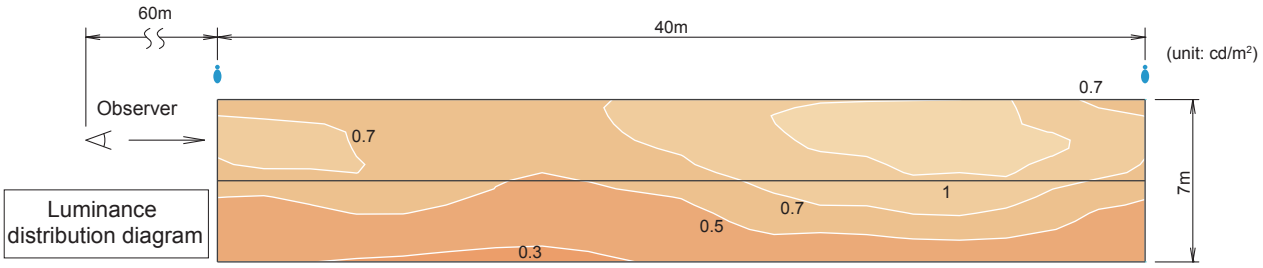


* The horizontal plane illumination distribution diagram above indicates the maintained value (maintenance factor: 0.7) (unit: ℓx).
* The above power consumption figures indicate average consumption when initial illuminance correction (80% dimming) is used.

Major arterial roads: Average road luminance: 0.7cd/m²

E7713SA9/300L <LEDioc ROAD 300L>

Design conditions: Road width: 7.0m, installation height: 10.0m, installation interval: 40.0m, OH: –1m, maintenance factor: 0.7, asphalt road surface: C2, qo=0.07

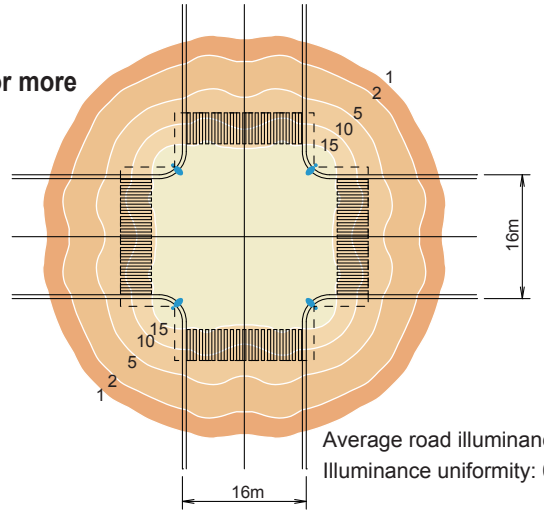


Average road luminance: 0.73cd/m²
Total uniformity: 0.43
Lane axis uniformity (primary lane): 0.51
Lane axis uniformity (secondary lane): 0.61
Relative threshold increase (glare TI first): 4.1%
Relative threshold increase (glare TI second): 3.3%

Intersection Average road illuminance: 15ℓx or more

E7714SA9/300C <LEDioc ROAD 300C>

Design conditions: Road width: 7.0m,
installation height: 10.0m, maintenance factor: 0.7



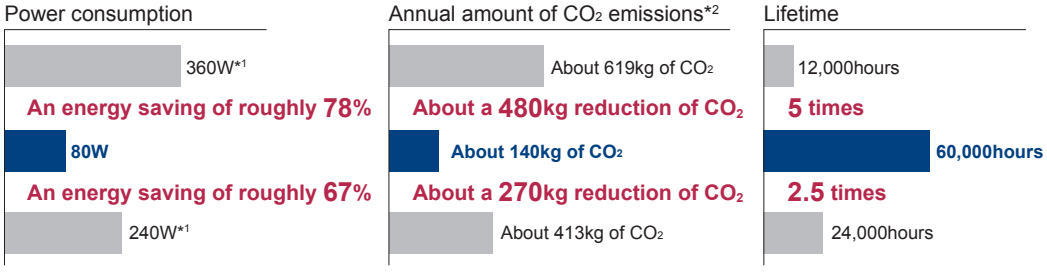
Average road illuminance 15.8ℓx
Illuminance uniformity: 0.46

Comparison example

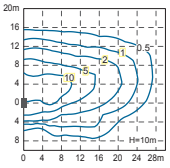
Mercury lamp for street lighting
(KSC-4/H745)
300W mercury lamp

LEDioc ROAD 300L
(E7713SA9/300L)

High-pressure sodium lamp for street lighting
(KSH-2/H7718)
180W high-pressure sodium lamp



*1 Power consumption follows the characteristics of "Road and tunnel luminaire specifications (established 2008) published by the Association of Electricity and Telecommunication Engineering for Land and Infrastructure.
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.



Continuous illumination **Straight pole type** **Semi cutoff**
With initial luminous flux correction **Weather-proof**

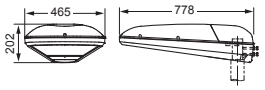
E7713SA9/250L

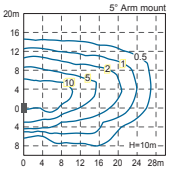
(Luminaire: E7713-0 + power supply unit:
WLE180V170M2C1/24-1)
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
6,020ℓm	64W (100V) 63W (200V)
Luminous efficacy	**LED module life**
94.0ℓm/W (100V) 95.5ℓm/W (200V)	60,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 5,700K (Cool daylight)	70

Specifications

Body: Diecast aluminum
Globe: Tempered glass
Finish color: Metallic silver
Pole inserted dimension: ϕ60.5 (2B) × 120mm
Power supply unit: WLE180V170M2C1/24-1
Weight: 14.9kg





Continuous illumination **Arm type** **Semi cutoff**
With initial luminous flux correction **Weather-proof**

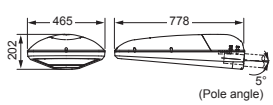
E7113SA9/250L

(Luminaire: E7113-0 + power supply unit:
WLE180V170M2C1/24-1)
(100 to 242V, 50/60Hz)

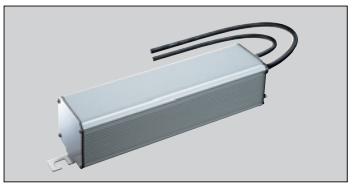
Rated luminous flux (luminaire luminous flux)	Power consumption
6,020ℓm	64W (100V) 63W (200V)
Luminous efficacy	**LED module life**
94.0ℓm/W (100V) 95.5ℓm/W (200V)	60,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 5,700K (Cool daylight)	70

Specifications

Body: Diecast aluminum
Globe: Tempered glass
Finish color: Metallic silver
Arm inserted dimension: ϕ60.5 (2B) × 120mm
Power supply unit: WLE180V170M2C1/24-1
Weight: 14.9kg



Power supply unit



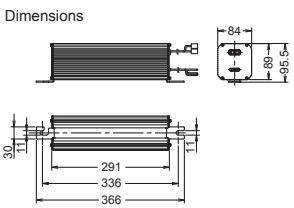
For the 250 series

WLE180V170M2C1/24-1

(100 to 242V, 50/60Hz)
15kV surge arrester unit

Body: Aluminum
Weight: 2.4kg
Applicable pole: Insertable pole ϕ130.8 (5B) or larger
Lead wire: 0.8m
Working voltage: 100 to 242V

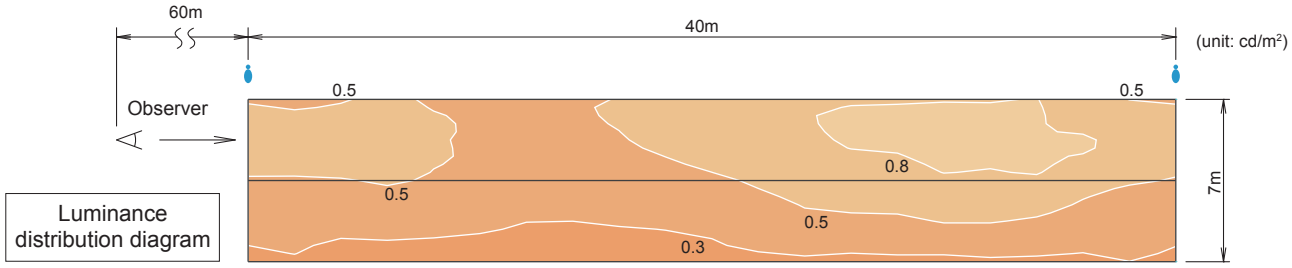
Dimensions



* The horizontal plane illumination distribution diagram above indicates maintained value (maintenance factor: 0.7) (unit: ℓx).
* The above power consumption figures indicate average consumption when initial illuminance correction (80% dimming) is used.

Arterial and minor arterial roads: Average road luminance: 0.5cd/m²

E7713SA9/250L <LEDioc ROAD 250L>
Design conditions: Road width: 7.0m, installation height: 10.0m, installation interval: 40.0m, OH: −1m, maintenance factor: 0.7, asphalt road surface: C2, qo=0.07



Luminance distribution diagram

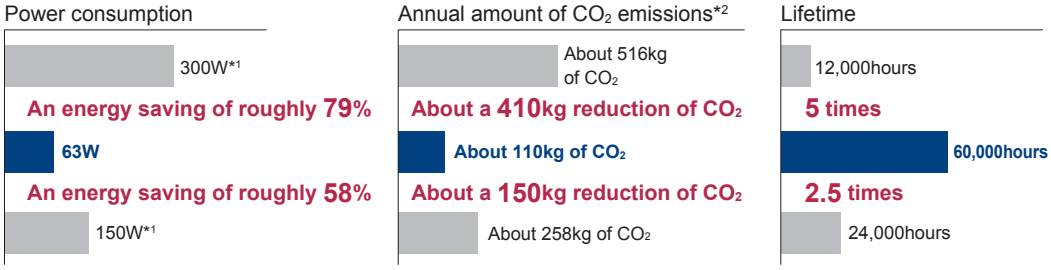
Average road luminance: 0.57cd/m²
Total uniformity: 0.43
Lane axis uniformity (primary lane): 0.52
Lane axis uniformity (secondary lane): 0.60
Relative threshold increase (glare TI first): 3.9%
Relative threshold increase (glare TI second): 3.2%

Comparison example

Mercury lamp for street lighting
(KSC-4/H745)
250W mercury lamp

LEDioc ROAD 250L
(E7713SA9/250L)

High-pressure sodium lamp for street lighting
(KSH-2/H7718)
110W high-pressure sodium lamp



*1 Power consumption follows the characteristics of "Road and tunnel luminaire specifications (established 2008) published by the Association of Electricity and Telecommunication Engineering for Land and Infrastructure.
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

Shin-Tomei Expressway, Shizuoka Service Area
(LEDioc ROAD)

Soseigawa Avenue
(LEDioc ROAD)

Roadside Station Mihara Shinmei-no-sato
(LEDioc ROAD)

Agatabashi Bridge
(LEDioc ROAD)

Kairakuen Parking Lot
(LEDioc ROAD)

Joetsu City street lights
(LEDioc ROAD)

Rumoi Station Plaza
(LEDioc ROAD)

Takarabashi Park
(LEDioc ROAD)

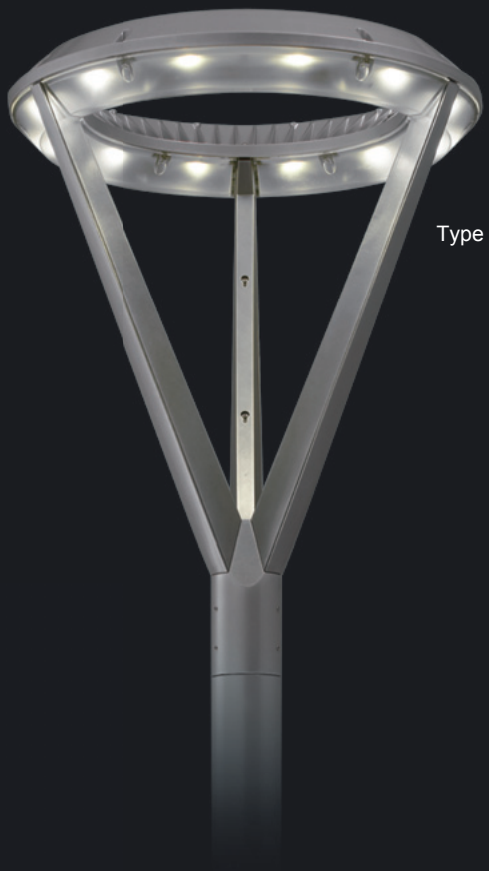
Shin-Tomei Expressway near Ebina Tollgate
(LEDioc ROAD co-PAZU)

Higashikoiso sidwalk lights
(LEDioc ROAD co-PAZU)

Hokuriku Expressway, Imajo Tunnel
(LEDioc TUNNEL)

Shin-Tomei Expressway, Shimizu Parking Area
(LEDioc TUNNEL)

LEDioc AREA Type D/Type G



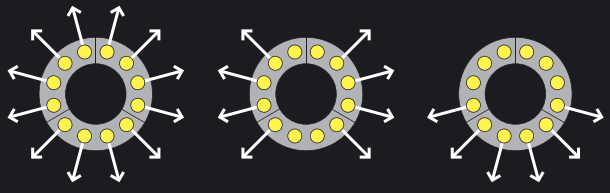
Type D

Type G

Unlike conventional luminaires that control brightness levels only, this LED landscape luminaire provides brightness and light control to ensure appropriate lighting depending on application and time period.

Light adjusted to application

Making good use of the inherent smallness of LED light sources, this luminaire was given a ring-like configuration to effectively control light distribution for three types of light distribution - omnidirectional, wide and front.



Omnidirectional light distribution | Wide light distribution | Front light distribution

In omnidirectional light distribution, our standard lineup offers a "wide-span type" that prioritizes wide distribution and a "high efficacy type" that provide efficient illumination of the road surface.

Wide-span type | High efficacy type

A wide lineup of model variations

The Types D and G provide a wide range of models, some of which cannot be found in conventional landscape luminaire lineups. The Type D comes in 24 models and Type G offers 36 different models. They are differentiated by two levels of brightness (equivalent to the brightness of 400W and 250W mercury lamps), three light distribution variations (omnidirectional, wide and front), two types of light color (daylight and warm white) and both come with or without dimming control.

List of product lineup

Type	Brightness	Light distribution		Dimming control	Light color				Set type	Rated luminous flux (Luminaire luminous flux)	Power consumption	
											Average value	Maximum value
Type D 	Mercury lamp 400W Equivalent	Omnidirectional light distribution	High efficacy type	No	5,000K				E5016SA9N	9460ℓm	127W(100V) 124W(200V) 124W(242V)	149W(100V) 144W(200V) 143W(242V)
					3,000K				E5016SA9LW	6480ℓm		
			Wide-span type		5,000K				E5017SA9N	8780ℓm		
					3,000K				E5017SA9LW	6020ℓm		
			High efficacy type	Yes	5,000K				E5016SA9N/D	9460ℓm	127W(100V) 124W(200V) 124W(242V)	149W(100V) 144W(200V) 143W(242V)
					3,000K				E5016SA9LW/D	6480ℓm		
			Wide-span type		5,000K				E5017SA9N/D	8780ℓm		
					3,000K				E5017SA9LW/D	6020ℓm		
	Mercury lamp 250W Equivalent	Omnidirectional light distribution	High efficacy type	No	5,000K				E5018SA9N	6640ℓm	96W(100V) 95W(200V) 96W(242V)	111W(100V) 109W(200V) 109W(242V)
					3,000K				E5018SA9LW	4550ℓm		
			Wide-span type		5,000K				E5019SA9N	6330ℓm		
					3,000K				E5019SA9LW	4340ℓm		
			High efficacy type	Yes	5,000K				E5018SA9N/D	6640ℓm	96W(100V) 95W(200V) 96W(242V)	111W(100V) 109W(200V) 109W(242V)
					3,000K				E5018SA9LW/D	4550ℓm		
			Wide-span type		5,000K				E5019SA9N/D	6330ℓm		
					3,000K				E5019SA9LW/D	4340ℓm		
	Mercury lamp 400W Equivalent	Wide light distribution	–	No	5,000K				E5024SA9N	8910ℓm	127W(100V) 124W(200V) 124W(242V)	149W(100V) 144W(200V) 143W(242V)
					3,000K				E5024SA9LW	6110ℓm		
			–	Yes	5,000K				E5024SA9N/D	8910ℓm		
					3,000K				E5024SA9LW/D	6110ℓm		
	Mercury lamp 400W Equivalent	Front light distribution	–	No	5,000K				E5025SA9N	9010ℓm	127W(100V) 124W(200V) 124W(242V)	149W(100V) 144W(200V) 143W(242V)
					3,000K				E5025SA9LW	6170ℓm		
			–	Yes	5,000K				E5025SA9N/D	9010ℓm		
					3,000K				E5025SA9LW/D	6170ℓm		
Type G 	Mercury lamp 400W Equivalent	Omnidirectional light distribution	High efficacy type	No	5,000K				E5020SA9N	11800ℓm	180W(100V) 175W(200V) 175W(242V)	197W(100V) 191W(200V) 190W(242V)
					3,000K				E5020SA9LW	8090ℓm		
			Wide-span type		5,000K				E5021SA9N	11100ℓm		
					3,000K				E5021SA9LW	7630ℓm		
			High efficacy type	Yes	5,000K				E5020SA9N/D	11800ℓm	180W(100V) 175W(200V) 175W(242V)	197W(100V) 191W(200V) 190W(242V)
					3,000K				E5020SA9LW/D	8090ℓm		
			Wide-span type		5,000K				E5021SA9N/D	11100ℓm		
					3,000K				E5021SA9LW/D	7630ℓm		
	Mercury lamp 250W Equivalent	Omnidirectional light distribution	High efficacy type	No	5,000K				E5022SA9N	8980ℓm	150W(100V) 147W(200V) 147W(242V)	162W(100V) 158W(200V) 158W(242V)
					3,000K				E5022SA9LW	6160ℓm		
			Wide-span type		5,000K				E5023SA9N	8670ℓm		
					3,000K				E5023SA9LW	5940ℓm		
			High efficacy type	Yes	5,000K				E5022SA9N/D	8980ℓm	150W(100V) 147W(200V) 147W(242V)	162W(100V) 158W(200V) 158W(242V)
					3,000K				E5022SA9LW/D	6160ℓm		
			Wide-span type		5,000K				E5023SA9N/D	8670ℓm		
					3,000K				E5023SA9LW/D	5940ℓm		
	Mercury lamp 400W Equivalent	Wide light distribution	–	No	5,000K				E5026SA9N	11200ℓm	180W(100V) 175W(200V) 175W(242V)	197W(100V) 191W(200V) 190W(242V)
					3,000K				E5026SA9LW	7710ℓm		
			–	Yes	5,000K				E5026SA9N/D	11200ℓm		
					3,000K				E5026SA9LW/D	7710ℓm		
	Mercury lamp 400W Equivalent	Front light distribution	–	No	5,000K				E5027SA9N	11300ℓm	180W(100V) 175W(200V) 175W(242V)	197W(100V) 191W(200V) 190W(242V)
					3,000K				E5027SA9LW	7780ℓm		
			–	Yes	5,000K				E5027SA9N/D	11300ℓm		
					3,000K				E5027SA9LW/D	7780ℓm		
	Mercury lamp 400W Equivalent	Omnidirectional light distribution	High efficacy type	Yes (light color variation type)	Ring	5,000K	Globe	5,000K ↓ 3,000K	E5028SA9N/D	11800ℓm(5000K) 11000ℓm(3000K)	180W(100V) 175W(200V) 175W(242V)	197W(100V) 191W(200V) 190W(242V)
					Ring	3,000K	Globe	3,000K ↓ 5,000K	E5028SA9LW/D	8820ℓm(5000K) 8090ℓm(3000K)		
			Wide-span type		Ring	5,000K	Globe	5,000K ↓ 3,000K	E5029SA9N/D	11100ℓm(5000K) 10300ℓm(3000K)		
					Ring	3,000K	Globe	3,000K ↓ 5,000K	E5029SA9LW/D	8360ℓm(5000K) 7630ℓm(3000K)		
	Mercury lamp 250W Equivalent	Omnidirectional light distribution	High efficacy type	Yes (light color variation type)	Ring	5,000K	Globe	5,000K ↓ 3,000K	E5030SA9N/D	8980ℓm(5000K) 8250ℓm(3000K)	150W(100V) 147W(200V) 147W(242V)	162W(100V) 158W(200V) 158W(242V)
					Ring	3,000K	Globe	3,000K ↓ 5,000K	E5030SA9LW/D	6890ℓm(5000K) 6160ℓm(3000K)		
			Wide-span type		Ring	5,000K	Globe	5,000K ↓ 3,000K	E5031SA9N/D	8670ℓm(5000K) 7930ℓm(3000K)		
					Ring	3,000K	Globe	3,000K ↓ 5,000K	E5031SA9LW/D	6890ℓm(5000K) 5940ℓm(3000K)		
	Mercury lamp 400W Equivalent	Wide light distribution	–	Yes (light color variation type)	Ring	5,000K	Globe	5,000K ↓ 3,000K	E5032SA9N/D	11200ℓm(5000K) 10500ℓm(3000K)	180W(100V) 175W(200V) 175W(242V)	197W(100V) 191W(200V) 190W(242V)
					Ring	3,000K	Globe	3,000K ↓ 5,000K	E5032SA9LW/D	8450ℓm(5000K) 7710ℓm(3000K)		
	Mercury lamp 400W Equivalent	Front light distribution	–	Yes (light color variation type)	Ring	5,000K	Globe	5,000K ↓ 3,000K	E5033SA9N/D	11300ℓm(5000K) 10600ℓm(3000K)	180W(100V) 175W(200V) 175W(242V)	197W(100V) 191W(200V) 190W(242V)
					Ring	3,000K	Globe	3,000K ↓ 5,000K	E5033SA9LW/D	8510ℓm(5000K) 77800ℓm(3000K)		

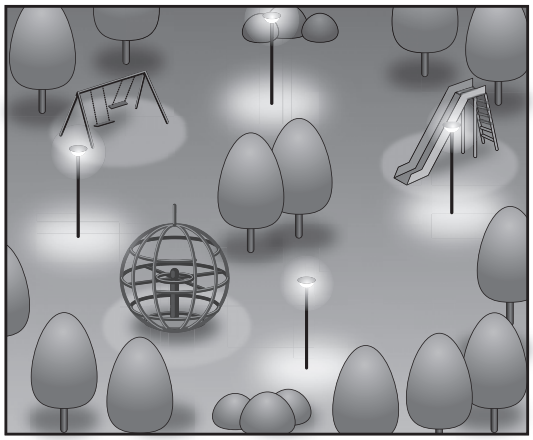
* The dimmable type requires a special dimming controller (Model ILSCON01A).
* When a dimming controller is used to control dimming, a terminating resistor (Model ILSCON01A-R) must be used on the last device in each system.
* The dimmable type dims the light in the range between 20% to 100%.
* The light color variation type allows the color in the globe to be switched between two colors. In addition to the daylight 5,000K and warm white 3,000K noted above, the light color can be set to blue or green (special order).
* The rated luminous flux for light color variation types is shown for each light color in the center of the globe.

The dimming control adjusts the light to suit the time of day and the event.

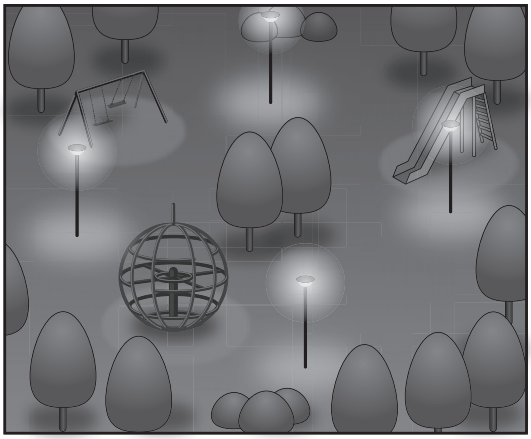
The combination of a dimming power unit and the designated dimming controller (type number ILSCON01A), produces even greater energy savings via precision dimming control to suit the time of day. In addition, switching the light color * makes it possible to render light to suit the scene, for a given time, season or event.

* When utilizing light-color switching, always use the designated luminaire (see P34-P35).

[Parks]

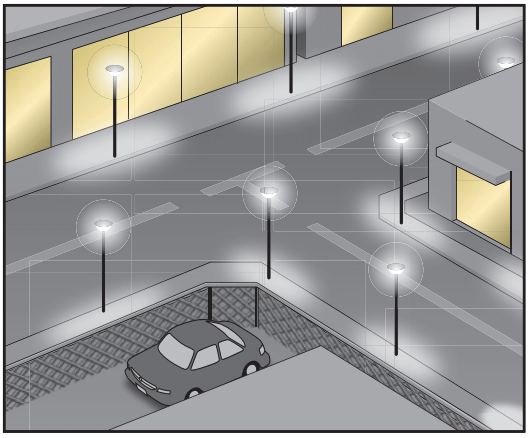


Normal nighttime illumination (100% lit)
Lighting can be ensured so parks can be used safely and securely even at night by lighting the inside of the park evenly with a broad-span type of luminaire. Also, we have a lineup of high efficacy luminaires, which limits light spillage into the neighborhood and ensures efficient illuminance.

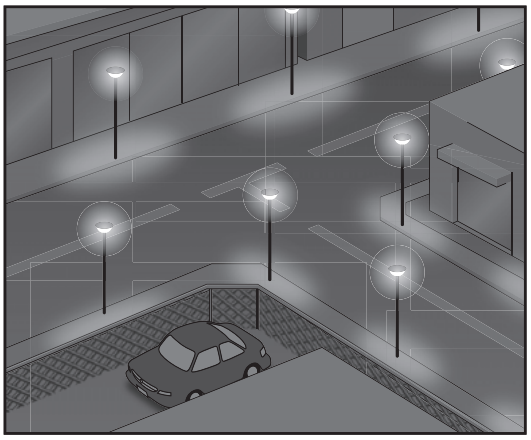


Illumination late at night (20% to 50% lit)
Automatically switching power to reduce waste, so lights are dimmed to 50% when pedestrian traffic decreases, and further to 20% when there is very little traffic late at night realizes both crime prevention and energy saving effects.

[Sidewalk and landscape luminaires]

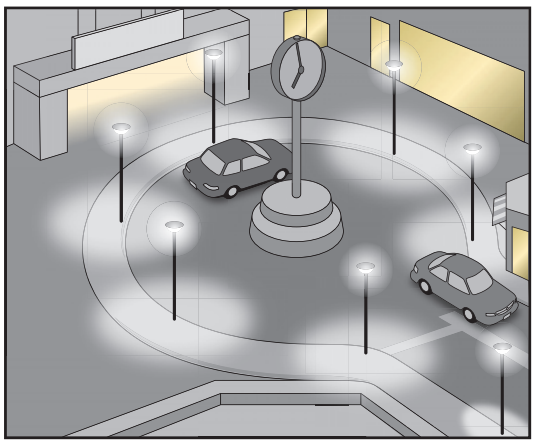


Normal nighttime illumination (100% lit)
The combination of the efficiently-illuminating ring and the diffused light from the milky white globe in the center of the luminaire ensure roads are lighted efficiently and the surface of the globe emits a soft light to give the scene a brighter feel.

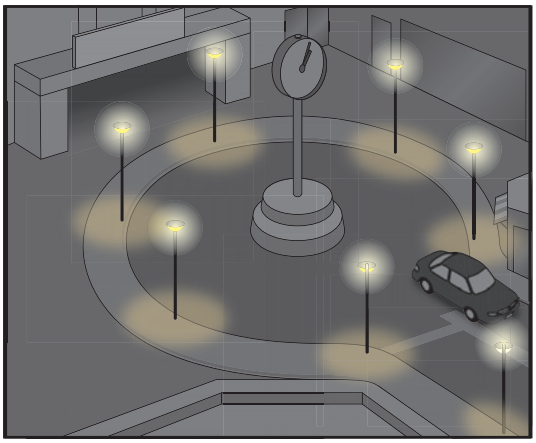


Illumination late at night (ring turned off)
Turning off the ring LED late at night when fewer people pass by and switching to the light from the globe in the center of luminaire ensures makes sure there is a minimal level of brightness in the space while ensuring safety on the road and at the same time achieving energy savings.

[Station square]



Normal nighttime illumination (100% lit)
The broad light distribution of the ring keeps the road lit brightly and evenly while the diffused light from the globe in the center of the luminaire gives a bright feeling to render a bustling station square spectacularly.

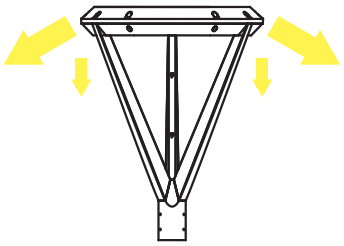


Illumination late at night (ring turned off, globe light color changed)
Turning off the LED of the ring late at night and switching the globe light from daylight to warm white color allows the scene to be changed from an active to a calm atmosphere.

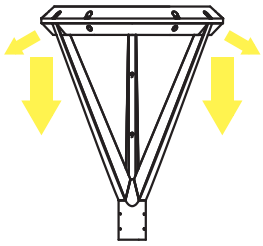
The ideal light distribution for the right location

Making good use of the inherent smallness of LED light sources, this luminaire was given a ring-like configuration to effectively control light distribution for three types of light distribution--omnidirectional, wide and front.

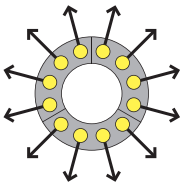
To enable the selection of the light distribution type that best fits a particular application, omnidirectional light distribution lamps come in a wide span type that maximizes light distribution and a high efficacy type that ensures efficient road surface illumination.



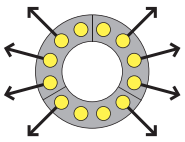
Omnidirectional light distribution/ wide span type



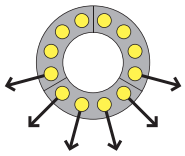
Omnidirectional light distribution/ high efficacy type



Omnidirectional light distribution



Wide light distribution



Front light distribution

Combining with the designated dimming controller enables dimming and switching the light color

Combining with the designated dimming controller enables greater energy conservation via precision dimming control to suit the time of day, as well as effectively rendering lighting to suit the scene, such as for the time, season and event, by switching the light color *.

Entirely lit

Only the ring part ON

Only the globe part ON (Daylight type)

Only the globe part ON (Warm white type)

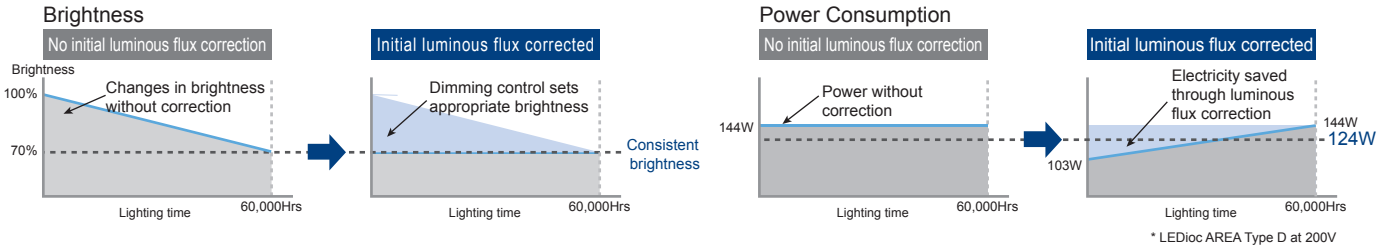
Only the globe part ON (Blue type)

Only the globe part ON (Green type)

* Light color cannot be changed for the ring part. However, the color of the globe can be switched between two colors (ex. daylight → warm white)

Initial luminous flux correction provided as a standard function

This control prevents excessive brightness after installation by maintaining a constant level of brightness until the end of its life, which cuts wasted power and contributes to energy conservation.



* LEDioc AREA Type D at 200V

Lightning and surge protection voltage of 15kV (common mode)

Designed to withstand 15kV surges, this highly durable LED luminaire reduces the probability of breakdown when lightning strikes.

Long life of 60,000hours

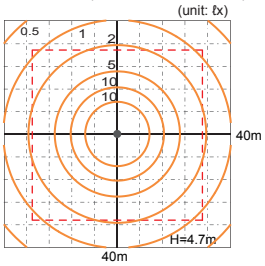
With a 60,000-hour life, this LED module lasts five times longer than a mercury lamp, dramatically reducing maintenance costs.

Works in a wide variety of environments and supports a wide range of working voltages

- A wide ambient operating temperature range of - 20°C to +35°C enables use in cold climates.
- Supports a wide range of voltages, from 100 to 242V.

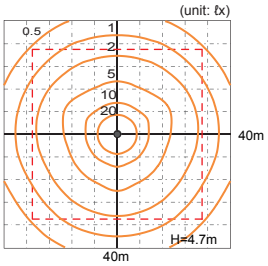
Comparison example

400W HID landscape luminaire
(400W mercury lamp)
(HG5011C + HF400X)



Same brightness

LEDioc AREA Type D
(E5017SA9N)



400W HID landscape luminaire
(400W mercury lamp)
(HG5011C + HF400X)

LEDioc AREA Type D
(E5017SA9N)

Average illuminance
(Area: 30m×30m)

7.0ℓx

7.0ℓx

Same brightness

Power consumption*1

415W
(HPF at 200V)

124W (at 200V, average)

An energy saving of roughly 70%

Annual amount of CO_2 emissions*2

About 714kg of CO_2

About 213kg of CO_2

About a 501kg reduction in CO_2

Lifetime

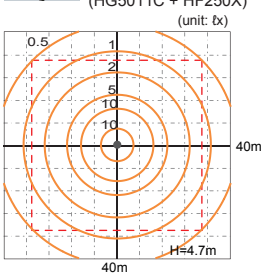
12,000hours

60,000hours

5 times

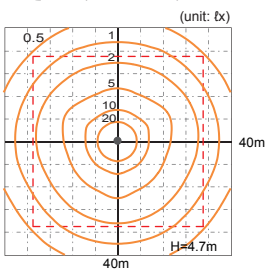
Comparison example

250W HID landscape luminaire
(250W mercury lamp)
(HG5011C + HF250X)



Same brightness

LEDioc AREA Type D
(E5019SA9N)



250W HID landscape luminaire
(250W mercury lamp)
(HG5011C + HF250X)

LEDioc AREA Type D
(E5019SA9N)

Average illuminance
(Area: 30m×30m)

4.0ℓx

5.0ℓx

Same brightness

Power consumption*1

260W
(HPF at 200V)

95W (at 200V, average)

An energy saving of roughly 63%

Annual amount of CO_2 emissions*2

About 447kg of CO_2

About 163kg of CO_2

About a 284kg reduction in CO_2

Lifetime

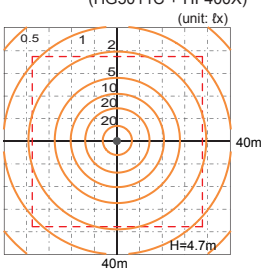
12,000hours

60,000hours

5 times

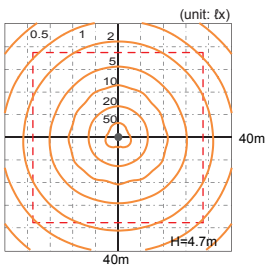
Comparison example

400W HID landscape luminaire
(400W mercury lamp)
(HG5011C + HF400X)



Same brightness

LEDioc AREA Type G
(E5021SA9N)



400W HID landscape luminaire
(400W mercury lamp)
(HG5011C + HF400X)

LEDioc AREA Type G
(E5021SA9N)

Average illuminance
(Area: 30m×30m)

7.0ℓx

8.7ℓx

Same brightness

Power consumption*1

415W
(HPF at 200V)

175W (at 200V, average)

An energy saving of roughly 58%

Annual amount of CO_2 emissions*2

About 714kg of CO_2

About 301kg of CO_2

About a 413kg reduction in CO_2

Lifetime

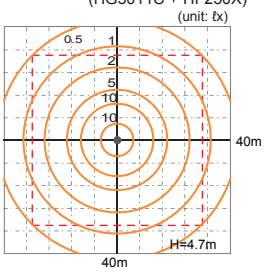
12,000hours

60,000hours

5 times

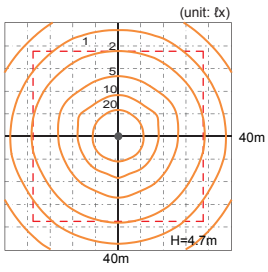
Comparison example

250W HID landscape luminaire
(250W mercury lamp)
(HG5011C + HF250X)



Same brightness

LEDioc AREA Type G
(E5023SA9N)



250W HID landscape luminaire
(250W mercury lamp)
(HG5011C + HF250X)

LEDioc AREA Type G
(E5023SA9N)

Average illuminance
(Area: 30m×30m)

4.0ℓx

6.7ℓx

Same brightness

Power consumption*1

260W
(HPF at 200V)

147W (at 200V, average)

An energy saving of roughly 43%

Annual amount of CO_2 emissions*2

About 447kg of CO_2

About 253kg of CO_2

About a 194kg reduction in CO_2

Lifetime

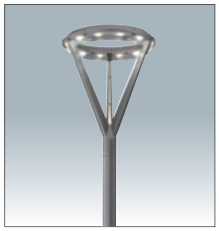
12,000hours

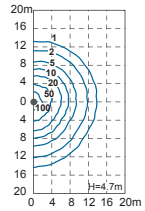
60,000hours

5 times

*1 Power consumption based on input voltages, mercury lamp: 200V (standard HPF ballast), LED: 200V.
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

 * Above illuminance diagram indicates initial values (unit: ℓx).





High efficacy type | Initial luminous flux correction | Weather-proof

E5016SA9N

(Luminaire: E5016N-0 + power supply unit: WLE260V625M1/24-1)
(100 to 242V, 50/60Hz)

E5016SA9N/D Dimmable type

(Luminaire: E5016N-0 + power supply unit: WLE260V625M1/24-2)
(100 to 242V, 50/60Hz)

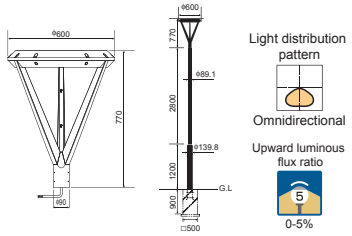
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
9,460ℓm	127W (100V) 124W (200V/242V)

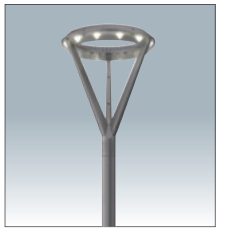
Luminous efficacy	LED module life
74.5ℓm/W (100V) 76.3ℓm/W (200V/242V)	60,000hours

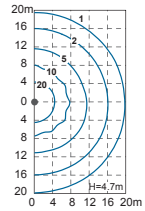
Light color	Color rendering index (Ra)
Equivalent to 5,000K (Daylight)	65

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (clear)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 9.8kg







Wide-span type | Initial luminous flux correction | Weather-proof

E5017SA9N

(Luminaire: E5017N-0 + power supply unit: WLE260V625M1/24-1)
(100 to 242V, 50/60Hz)

E5017SA9N/D Dimmable type

(Luminaire: E5017N-0 + power supply unit: WLE260V625M1/24-2)
(100 to 242V, 50/60Hz)

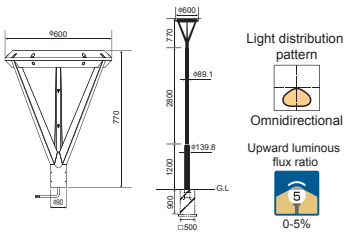
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
8,780ℓm	127W (100V) 124W (200V/242V)

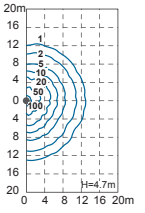
Luminous efficacy	LED module life
69.1ℓm/W (100V) 70.8ℓm/W (200V/242V)	60,000hours

Light color	Color rendering index (Ra)
Equivalent to 5,000K (Daylight)	65

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (clear)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 9.8kg





High efficacy type | Initial luminous flux correction | Weather-proof

E5018SA9N

(Luminaire: E5018N-0 + power supply unit: WLE260V625M1/24-1)
(100 to 242V, 50/60Hz)

E5018SA9N/D Dimmable type

(Luminaire: E5018N-0 + power supply unit: WLE260V625M1/24-2)
(100 to 242V, 50/60Hz)

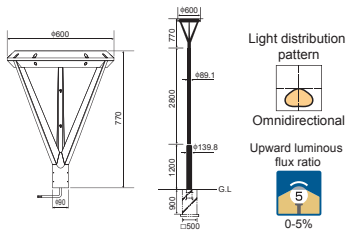
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
6,640ℓm	96W (100V) 95W (200V) 96W (242V)

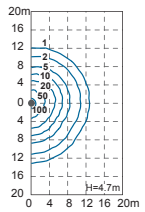
Luminous efficacy	LED module life
69.2ℓm/W (100V) 69.9ℓm/W (200V) 69.2ℓm/W (242V)	60,000hours

Light color	Color rendering index (Ra)
Equivalent to 5,000K (Daylight)	65

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (clear)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 9.8kg





High efficacy type | Initial luminous flux correction | Weather-proof

E5016SA9LW

(Luminaire: E5016LW-0 + power supply unit: WLE260V625M1/24-1)
(100 to 242V, 50/60Hz)

E5016SA9LW/D Dimmable type

(Luminaire: E5016LW-0 + power supply unit: WLE260V625M1/24-2)
(100 to 242V, 50/60Hz)

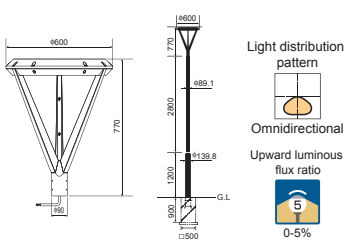
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
6,480ℓm	127W (100V) 124W (200V/242V)

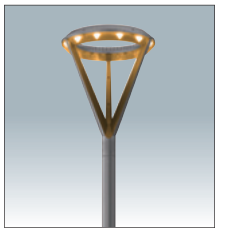
Luminous efficacy	LED module life
51.0ℓm/W (100V) 52.3ℓm/W (200V/242V)	60,000hours

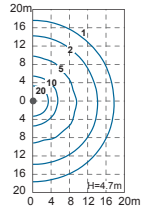
Light color	Color rendering index (Ra)
Equivalent to 3,000K (Warm white)	85

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (clear)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 9.8kg







Wide-span type | Initial luminous flux correction | Weather-proof

E5017SA9LW

(Luminaire: E5017LW-0 + power supply unit: WLE260V625M1/24-1)
(100 to 242V, 50/60Hz)

E5017SA9LW/D Dimmable type

(Luminaire: E5017LW-0 + power supply unit: WLE260V625M1/24-2)
(100 to 242V, 50/60Hz)

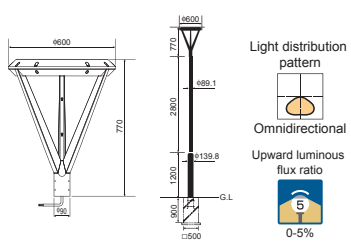
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
6,020ℓm	127W (100V) 124W (200V/242V)

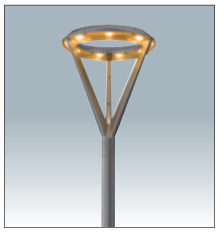
Luminous efficacy	LED module life
47.4ℓm/W (100V) 48.5ℓm/W (200V/242V)	60,000hours

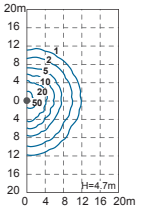
Light color	Color rendering index (Ra)
Equivalent to 3,000K (Warm white)	85

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (clear)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 9.8kg







High efficacy type | Initial luminous flux correction | Weather-proof

E5018SA9LW

(Luminaire: E5018LW-0 + power supply unit: WLE260V625M1/24-1)
(100 to 242V, 50/60Hz)

E5018SA9LW/D Dimmable type

(Luminaire: E5018LW-0 + power supply unit: WLE260V625M1/24-2)
(100 to 242V, 50/60Hz)

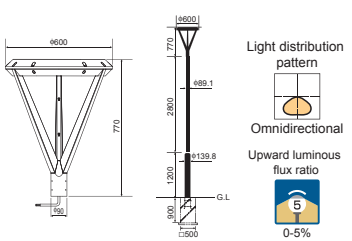
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
4,550ℓm	96W (100V) 95W (200V) 96W (242V)

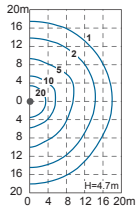
Luminous efficacy	LED module life
47.4ℓm/W (100V) 47.9ℓm/W (200V) 47.4ℓm/W (242V)	60,000hours

Light color	Color rendering index (Ra)
Equivalent to 3,000K (Warm white)	85

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (clear)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 9.8kg





Wide-span type | Initial luminous flux correction | Weather-proof

E5019SA9N

(Luminaire: E5019N-0 + power supply unit: WLE260V625M1/24-1)
(100 to 242V, 50/60Hz)

E5019SA9N/D Dimmable type

(Luminaire: E5019N-0 + power supply unit: WLE260V625M1/24-2)
(100 to 242V, 50/60Hz)

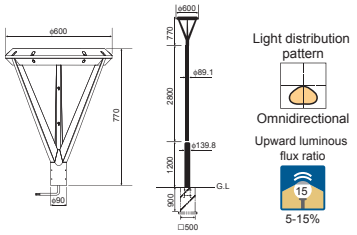
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
6,330ℓm/W	96W (100V) 95W (200V) 96W (242V)

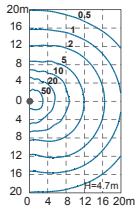
Luminous Efficacy
65.9ℓm/W (100V) 66.6ℓm/W (200V) 65.9ℓm/W (242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	65

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (clear)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 9.8kg





Wide distribution type | Initial luminous flux correction | Weather-proof

E5024SA9N

(Luminaire: E5024N-0 + power supply unit: WLE260V625M1/24-1)
(100 to 242V, 50/60Hz)

E5024SA9N/D Dimmable type

(Luminaire: E5024N-0 + power supply unit: WLE260V625M1/24-2)
(100 to 242V, 50/60Hz)

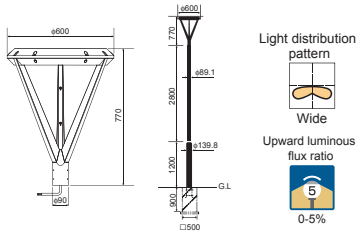
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
8,910ℓm	127W (100V) 124W (200V/242V)

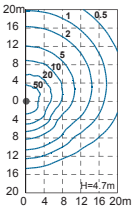
Luminous Efficacy
70.2ℓm/W (100V) 71.9ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	65

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (clear)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 9.8kg





Front distribution type | Initial luminous flux correction | Weather-proof

E5025SA9N

(Luminaire: E5025N-0 + power supply unit: WLE260V625M1/24-1)
(100 to 242V, 50/60Hz)

E5025SA9N/D Dimmable type

(Luminaire: E5025N-0 + power supply unit: WLE260V625M1/24-2)
(100 to 242V, 50/60Hz)

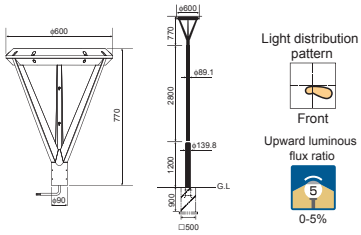
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
9,010ℓm	127W (100V) 124W (200V/242V)

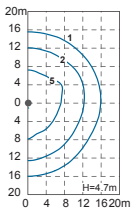
Luminous Efficacy
70.9ℓm/W (100V) 72.7ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	65

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (clear)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 9.8kg





Wide-span type | Initial luminous flux correction | Weather-proof

E5019SA9LW

(Luminaire: E5019LW-0 + power supply unit: WLE260V625M1/24-1)
(100 to 242V, 50/60Hz)

E5019SA9LW/D Dimmable type

(Luminaire: E5019LW-0 + power supply unit: WLE260V625M1/24-2)
(100 to 242V, 50/60Hz)

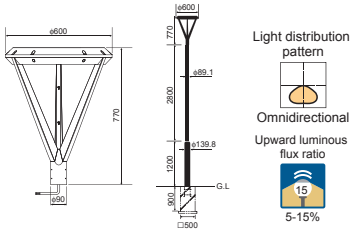
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
4,340ℓm	96W (100V) 95W (200V) 96W (242V)

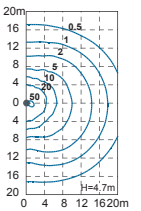
Luminous Efficacy
45.2ℓm/W (100V) 45.7ℓm/W (200V) 45.2ℓm/W (242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,000K (Warm white)	85

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (clear)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 9.8kg





Wide distribution type | Initial luminous flux correction | Weather-proof

E5024SA9LW

(Luminaire: E5024LW-0 + power supply unit: WLE260V625M1/24-1)
(100 to 242V, 50/60Hz)

E5024SA9LW/D Dimmable type

(Luminaire: E5024LW-0 + power supply unit: WLE260V625M1/24-2)
(100 to 242V, 50/60Hz)

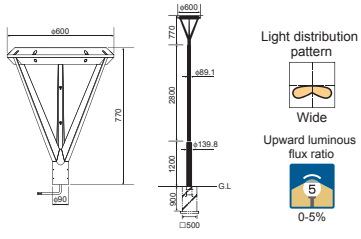
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
6,110ℓm	127W (100V) 124W (200V/242V)

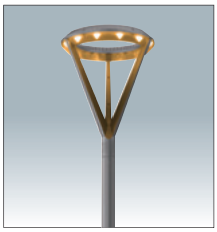
Luminous Efficacy
48.1ℓm/W (100V) 49.3 ℓm/W (200V/242V)

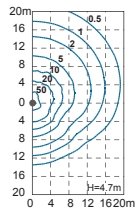
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,000K (Warm white)	85

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (clear)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 9.8kg







Front distribution type | Initial luminous flux correction | Weather-proof

E5025SA9LW

(Luminaire: E5025LW-0 + power supply unit: WLE260V625M1/24-1)
(100 to 242V, 50/60Hz)

E5025SA9LW/D Dimmable type

(Luminaire: E5025LW-0 + power supply unit: WLE260V625M1/24-2)
(100 to 242V, 50/60Hz)

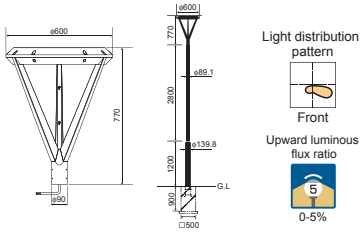
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
6,170ℓm	127W (100V) 124W (200V/242V)

Luminous Efficacy
48.6ℓm/W (100V) 49.8 ℓm/W (200V/242V)

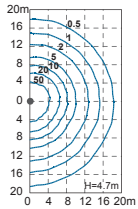
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,000K (Warm white)	85

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (clear)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 9.8kg



* Above illuminance diagram indicates initial values (unit: ℓx).



High efficacy type **Initial luminous flux correction** **Weather-proof**

E5020SA9N

(Luminaire: E5020N-0 + power supply unit: WLE260V625M2C1/24-1)
(100 to 242V, 50/60Hz)

E5020SA9N/D Dimmable type

(Luminaire: E5020N-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

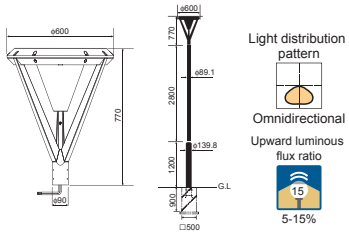
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
11,800ℓm	180W (100V) 175W (200V/242V)

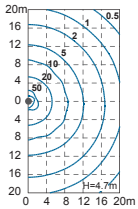
Luminous Efficacy
65.6ℓm/W (100V) 67.4ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	65

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (ring: clear, center: milky white)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 13.6kg





Wide-span type **Initial luminous flux correction** **Weather-proof**

E5021SA9N

(Luminaire: E5021N-0 + power supply unit: WLE260V625M2C1/24-1)
(100 to 242V, 50/60Hz)

E5021SA9N/D Dimmable type

(Luminaire: E5021N-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

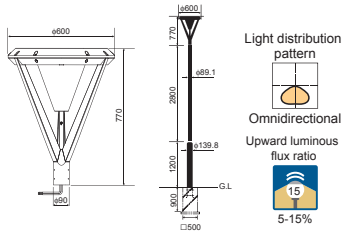
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
11,100ℓm	180W (100V) 175W (200V/242V)

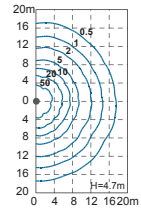
Luminous Efficacy
61.7ℓm/W (100V) 63.4ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	65

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (ring: clear, center: milky white)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 13.6kg





High efficacy type **Initial luminous flux correction** **Weather-proof**

E5022SA9N

(Luminaire: E5022N-0 + power supply unit: WLE260V625M2C1/24-1)
(100 to 242V, 50/60Hz)

E5022SA9N/D Dimmable type

(Luminaire: E5022N-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

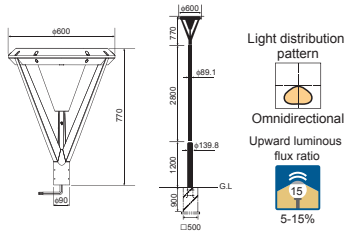
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
8,980ℓm	150W (100V) 147W (200V/242V)

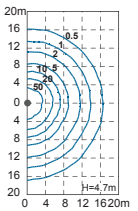
Luminous Efficacy
59.9ℓm/W (100V) 61.1ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	65

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (ring: clear, center: milky white)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 13.6kg





High efficacy type **Initial luminous flux correction** **Weather-proof**

E5020SA9LW

(Luminaire: E5020LW-0 + power supply unit: WLE260V625M2C1/24-1)
(100 to 242V, 50/60Hz)

E5020SA9LW/D Dimmable type

(Luminaire: E5020LW-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

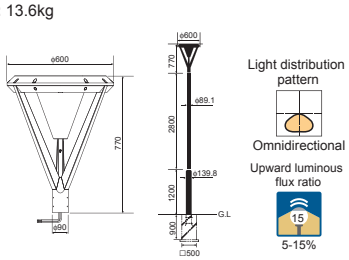
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
8,090ℓm	180W (100V) 175W (200V/242V)

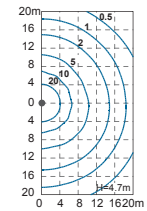
Luminous Efficacy
44.9ℓm/W (100V) 46.2ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,000K (Warm white)	85

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (ring: clear, center: milky white)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 13.6kg





Wide-span type **Initial luminous flux correction** **Weather-proof**

E5021SA9LW

(Luminaire: E5021LW-0 + power supply unit: WLE260V625M2C1/24-1)
(100 to 242V, 50/60Hz)

E5021SA9LW/D Dimmable type

(Luminaire: E5021LW-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

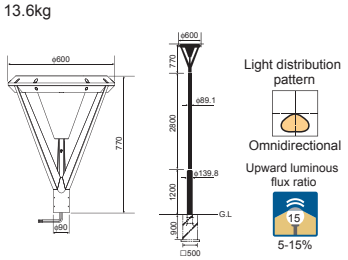
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
7,630ℓm	180W (100V) 175W (200V/242V)

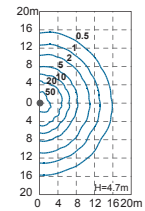
Luminous Efficacy
42.4ℓm/W (100V) 43.6ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,000K (Warm white)	85

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (ring: clear, center: milky white)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 13.6kg





High efficacy type **Initial luminous flux correction** **Weather-proof**

E5022SA9LW

(Luminaire: E5022LW-0 + power supply unit: WLE260V625M2C1/24-1)
(100 to 242V, 50/60Hz)

E5022SA9LW/D Dimmable type

(Luminaire: E5022LW-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

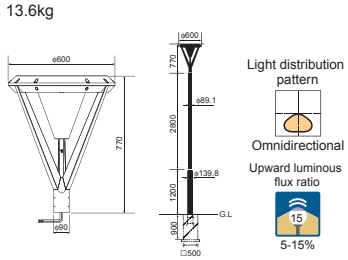
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
6,160ℓm	150W (100V) 147W (200V/242V)

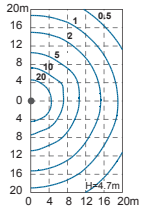
Luminous Efficacy
41.1ℓm/W (100V) 41.9ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,000K (Warm white)	85

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (ring: clear, center: milky white)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 13.6kg





Wide-span type | Initial luminous flux correction | Weather-proof

E5023SA9N

(Luminaire: E5023N-0 + power supply unit: WLE260V625M2C1/24-1)
(100 to 242V, 50/60Hz)

E5023SA9N/D Dimmable type

(Luminaire: E5023N-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

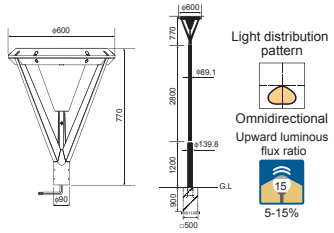
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
8,670ℓm	150W (100V) 147W (200V/242V)

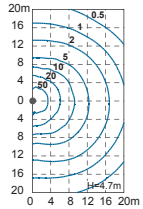
Luminous Efficacy
57.8ℓm/W (100V) 59.0ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	65

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (ring: clear, center: milky white)
Body: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: 76.3 × 110mm
Weight: 13.6kg





Wide light distribution | Initial luminous flux correction | Weather-proof

E5026SA9N

(Luminaire: E5026N-0 + power supply unit: WLE260V625M2C1/24-1)
(100 to 242V, 50/60Hz)

E5026SA9N/D Dimmable type

(Luminaire: E5026N-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

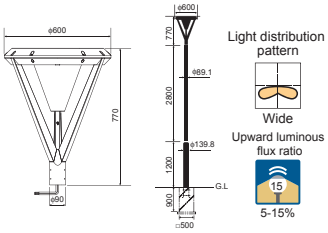
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
11,200ℓm	180W (100V) 175W (200V/242V)

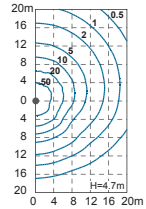
Luminous Efficacy
62.2ℓm/W (100V) 64.0ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	65

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (ring: clear, center: milky white)
Body: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: 76.3 × 110mm
Weight: 13.6kg





Front light distribution | Initial luminous flux correction | Weather-proof

E5027SA9N

(Luminaire: E5027N-0 + power supply unit: WLE260V625M2C1/24-1)
(100 to 242V, 50/60Hz)

E5027SA9N/D Dimmable type

(Luminaire: E5027N-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

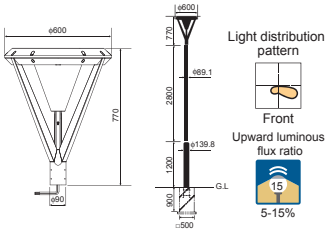
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
11,300ℓm	180W (100V) 175W (200V/242V)

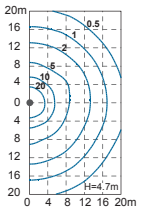
Luminous Efficacy
62.8ℓm/W (100V) 64.6ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	65

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (ring: clear, center: milky white)
Body: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: 76.3 × 110mm
Weight: 13.6kg





Wide-span type | Initial luminous flux correction | Weather-proof

E5023SA9LW

(Luminaire: E5023LW-0 + power supply unit: WLE260V625M2C1/24-1)
(100 to 242V, 50/60Hz)

E5023SA9LW/D Dimmable type

(Luminaire: E5023LW-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

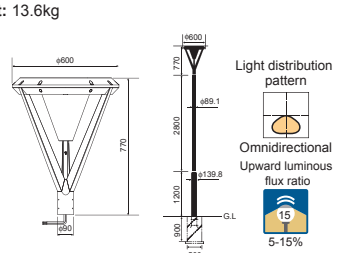
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
5,940ℓm	150W (100V) 147W (200V/242V)

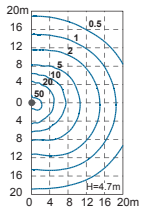
Luminous Efficacy
39.6ℓm/W (100V) 40.4ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,000K (Warm white)	85

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (ring: clear, center: milky white)
Body: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: 76.3 × 110mm
Weight: 13.6kg





Wide light distribution | Initial luminous flux correction | Weather-proof

E5026SA9LW

(Luminaire: E5026LW-0 + power supply unit: WLE260V625M2C1/24-1)
(100 to 242V, 50/60Hz)

E5026SA9LW/D Dimmable type

(Luminaire: E5026LW-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

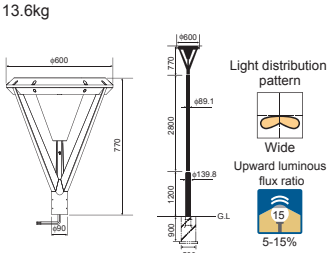
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
7,710ℓm	180W (100V) 175W (200V/242V)

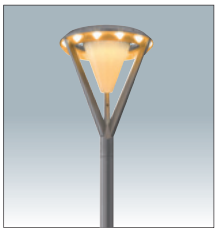
Luminous Efficacy
42.8ℓm/W (100V) 44.1ℓm/W (200V/242V)

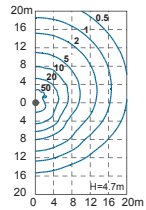
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,000K (Warm white)	85

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (ring: clear, center: milky white)
Body: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: 76.3 × 110mm
Weight: 13.6kg







Front light distribution | Initial luminous flux correction | Weather-proof

E5027SA9LW

(Luminaire: E5027LW-0 + power supply unit: WLE260V625M2C1/24-1)
(100 to 242V, 50/60Hz)

E5027SA9LW/D Dimmable type

(Luminaire: E5027LW-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

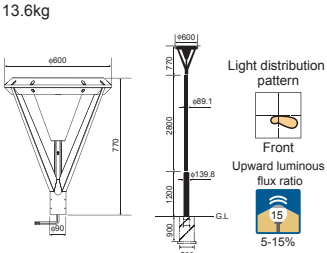
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
7,780ℓm	180W (100V) 175W (200V/242V)

Luminous Efficacy
43.2ℓm/W (100V) 44.5ℓm/W (200V/242V)

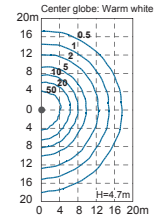
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,000K (Warm white)	85

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (ring: clear, center: milky white)
Body: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: 76.3 × 110mm
Weight: 13.6kg



 * Above illuminance diagram indicates initial values (unit: ℓx).



High efficacy type | Initial luminous flux correction | Dimmable type | Weather-proof

E5028SA9N/D

(Luminaire: E5028N-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

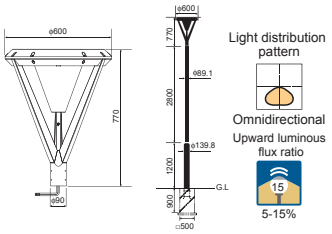
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
[5,000K] 11,800ℓm [3,000K] 11,000ℓm	180W (100V) 175W (200V/242V)

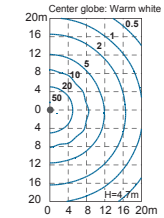
Luminous Efficacy
[5,000K] 65.6ℓm/W (100V) 67.4ℓm/W (200V/242V)
[3,000K] 61.1ℓm/W (100V) 62.9ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	65

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (ring: clear, center: milky white)
Body: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: 76.3 × 110mm
Weight: 14.5kg





Wide-span type | Initial luminous flux correction | Dimmable type | Weather-proof

E5029SA9N/D

(Luminaire: E5029N-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

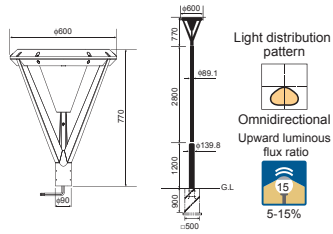
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
[5,000K] 11,100ℓm [3,000K] 10,300ℓm	180W (100V) 175W (200V/242V)

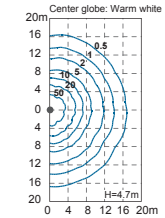
Luminous Efficacy
[5,000K] 61.7ℓm/W (100V) 63.4ℓm/W (200V/242V)
[3,000K] 57.2ℓm/W (100V) 58.9ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	65

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (ring: clear, center: milky white)
Body: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: 76.3 × 110mm
Weight: 14.5kg





High efficacy type | Initial luminous flux correction | Dimmable type | Weather-proof

E5030SA9N/D

(Luminaire: E5030N-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

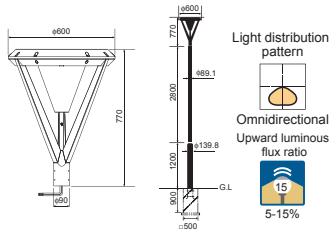
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
[5,000K] 8,980ℓm [3,000K] 8,250ℓm	150W (100V) 147W (200V/242V)

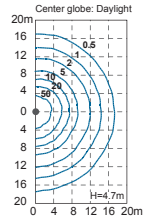
Luminous Efficacy
[5,000K] 59.9ℓm/W (100V) 61.1ℓm/W (200V/242V)
[3,000K] 55.0ℓm/W (100V) 56.1ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	65

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (ring: clear, center: milky white)
Body: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: 76.3 × 110mm
Weight: 14.5kg





High efficacy type | Initial luminous flux correction | Dimmable type | Weather-proof

E5028SA9LW/D

(Luminaire: E5028LW-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

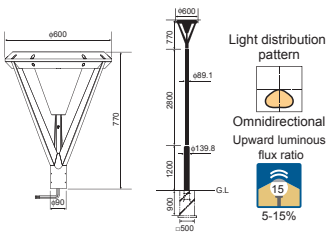
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
[5,000K] 8,820ℓm [3,000K] 8,090ℓm	180W (100V) 175W (200V/242V)

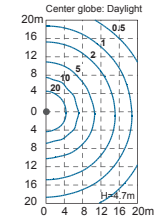
Luminous Efficacy
[5,000K] 49.0ℓm/W (100V) 50.4ℓm/W (200V/242V)
[3,000K] 44.9ℓm/W(100V) 46.2ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,000K (Warm white)	85

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (ring: clear, center: milky white)
Body: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: 76.3 × 110mm
Weight: 14.5kg





Wide-span type | Initial luminous flux correction | Dimmable type | Weather-proof

E5029SA9LW/D

(Luminaire: E5029LW-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

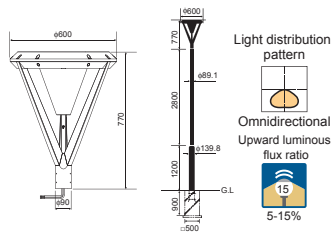
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
[5,000K] 8,360ℓm [3,000K] 7,630ℓm	180W (100V) 175W (200V/242V)

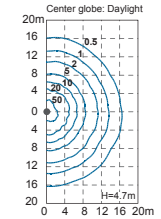
Luminous Efficacy
[5,000K] 46.4ℓm/W (100V) 47.8ℓm/W (200V/242V)
[3,000K] 42.4ℓm/W (100V) 43.6ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,000K (Warm white)	85

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (ring: clear, center: milky white)
Body: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: 76.3 × 110mm
Weight: 14.5kg





High efficacy type | Initial luminous flux correction | Dimmable type | Weather-proof

E5030SA9LW/D

(Luminaire: E5030LW-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

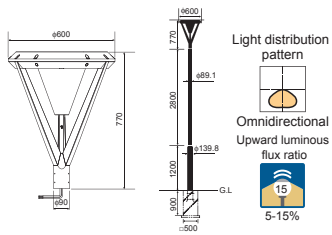
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
[5,000K] 6,890ℓm [3,000K] 6,160ℓm	150W (100V) 147W (200V/242V)

Luminous Efficacy
[5,000K] 45.9ℓm/W (100V) 46.9ℓm/W (200V/242V)
[3,000K] 41.1ℓm/W (100V) 41.9ℓm/W (200V/242V)

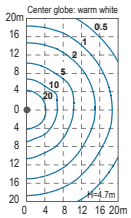
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,000K (Warm white)	85

Specifications

Body: Diecast aluminum
Globe: Polycarbonate (ring: clear, center: milky white)
Body: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: 76.3 × 110mm
Weight: 14.5kg



* Characteristic values for the rated luminous flux and luminous efficacy above are shown for each light color of the LED lit from the globe in the center of the luminaire.



Wide-span type | Initial luminous flux correction | Dimmable type | Weather-proof

E5031SA9N/D

(Luminaire: E5031N-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

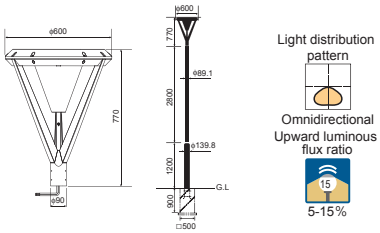
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
[5,000K] 8,670ℓm [3,000K] 7,930ℓm	150W (100V) 147W (200V/242V)

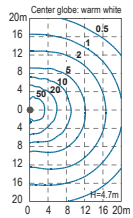
Luminous Efficacy
[5,000K] 57.8ℓm/W (100V) 59.0ℓm/W (200V/242V)
[3,000K] 52.9ℓm/W (100V) 53.9ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	65

Specifications

Body: Diecast aluminum
Globe: polycarbonate (ring: transparent, center: milky white)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 14.5kg





Wide distribution light type | Initial luminous flux correction | Dimmable type | Weather-proof

E5032SA9N/D

(Luminaire: E5032N-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

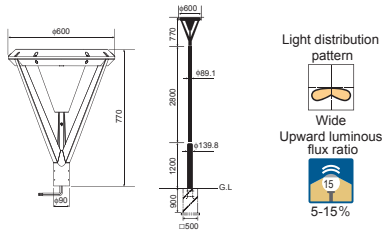
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
[5,000K] 11,200ℓm [3,000K] 10,500ℓm	180W (100V) 175W (200V/242V)

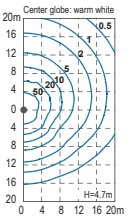
Luminous Efficacy
[5,000K] 62.2ℓm/W (100V) 64.0ℓm/W (200V/242V)
[3,000K] 58.3ℓm/W (100V) 60.0ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	65

Specifications

Body: Diecast aluminum
Globe: polycarbonate (ring: transparent, center: milky white)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 14.5kg





Front distribution type | Initial luminous flux correction | Dimmable type | Weather-proof

E5033SA9N/D

(Luminaire: E5033N-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

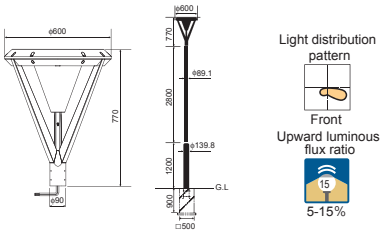
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
5,000K] 11,300ℓm [3,000K] 10,600ℓm	180W (100V) 175W (200V/242V)

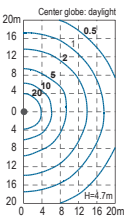
Luminous Efficacy
[5,000K] 62.8ℓm/W (100V) 64.6ℓm/W (200V/242V)
[3,000K] 58.9ℓm/W (100V) 60.6ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	65

Specifications

Body: Diecast aluminum
Globe: polycarbonate (ring: transparent, center: milky white)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 14.5kg





Wide-span type | Initial luminous flux correction | Dimmable type | Weather-proof

E5031SA9LW/D

(Luminaire: E5031LW-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

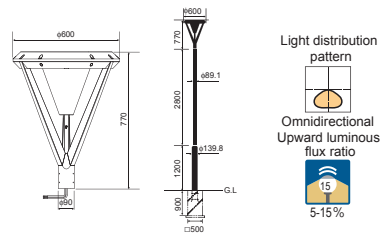
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
[5,000K] 6,890ℓm [3,000K] 5,940ℓm	150W (100V) 147W (200V/242V)

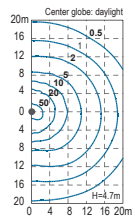
Luminous Efficacy
[5,000K] 45.9ℓm/W (100V) 46.9ℓm/W (200V/242V)
[3,000K] 39.6ℓm/W (100V) 40.4ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,000K (Warm white)	85

Specifications

Body: Diecast aluminum
Globe: polycarbonate (ring: transparent, center: milky white)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 14.5kg





Wide distribution light type | Initial luminous flux correction | Dimmable type | Weather-proof

E5032SA9LW/D

(Luminaire: E5032LW-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

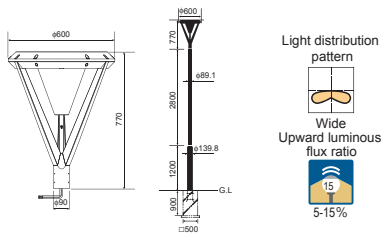
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
[5,000K] 8,450ℓm [3,000K] 7,710ℓm	180W (100V) 175W (200V/242V)

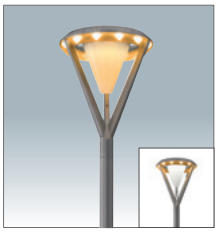
Luminous Efficacy
[5,000K] 46.9ℓm/W (100V) 48.3ℓm/W (200V/242V)
[3,000K] 42.8ℓm/W (100V) 44.1ℓm/W (200V/242V)

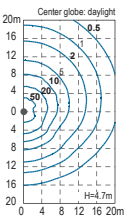
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,000K (Warm white)	85

Specifications

Body: Diecast aluminum
Globe: polycarbonate (ring: transparent, center: milky white)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 14.5kg







Front distribution type | Initial luminous flux correction | Dimmable type | Weather-proof

E5033SA9LW/D

(Luminaire: E5033LW-0 + power supply unit: WLE260V625M2C1/24-2)
(100 to 242V, 50/60Hz)

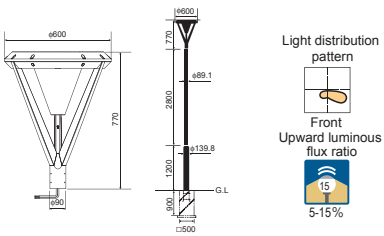
Rated luminous flux (luminaire luminous flux)	Power consumption (average)
[5,000K] 8,510ℓm [3,000K] 7,780ℓm	180W (100V) 175W (200V/242V)

Luminous Efficacy
[5,000K] 47.3ℓm/W (100V) 48.6ℓm/W (200V/242V)
[3,000K] 43.2ℓm/W (100V) 44.5ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,000K (Warm white)	85

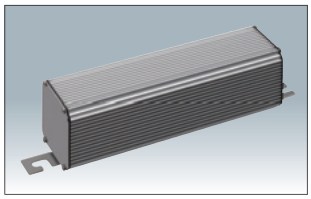
Specifications

Body: Diecast aluminum
Globe: polycarbonate (ring: transparent, center: milky white)
Arm: Diecast aluminum
Finish color: Metallic silver
Pole inserted dimension: ϕ76.3 × 110mm
Weight: 14.5kg



* Above illuminance diagram indicates initial values (unit: ℓx).
* Characteristic values for the rated luminous flux and luminous efficacy above are shown for each light color of the LED lit from the globe in the center of the luminaire.

Power supply unit

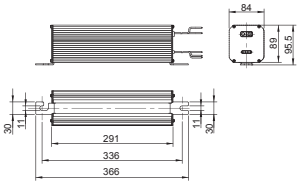


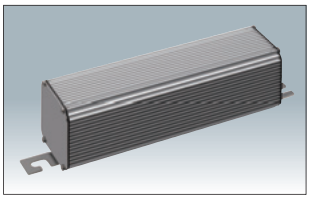
For Type D **For inside pole**
15kV surge arrester unit

WLE260V625M1/24-1

(100 to 242V, 50/60Hz)

Body: Aluminum
Weight: 2.4kg
Applicable pole: Insertable pole ϕ130.8 (5B) or larger
Lead wire: 0.5m





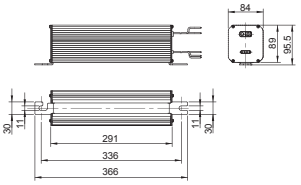
For Type D **For inside pole**
15kV surge arrester unit

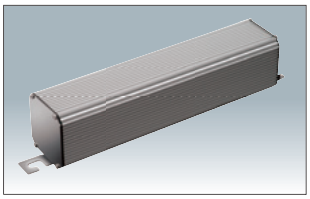
WLE260V625M1/24-2

(100 to 242V, 50/60Hz)

Body: Aluminum
Weight: 2.4kg
Applicable pole: Insertable pole ϕ130.8 (5B) or larger
Lead wire: 0.5m

* When using dimming control, combine with the designated dimming controller (model ILSCON01A).



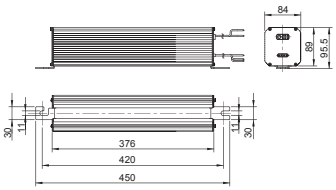


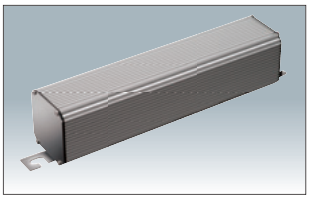
For Type D **For inside pole**
15kV surge arrester unit

WLE260V625M2C1/24-1

(100 to 242V, 50/60Hz)

Body: Aluminum
Weight: 3.1kg
Applicable pole: Insertable pole ϕ130.8 (5B) or larger
Lead wire: 0.6m





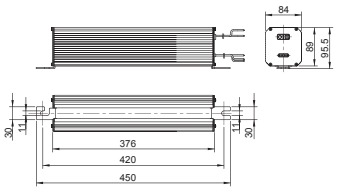
Type G for dimming **For inside pole**
15kV surge arrester unit

WLE260V625M2C1/24-2

(100 to 242V, 50/60Hz)

Body: Aluminum
Weight: 3.2kg
Applicable pole: Insertable pole ϕ130.8 or larger
Lead wire: 0.6m

* When using dimming control, combine with the designated dimming controller (model ILSCON01A).



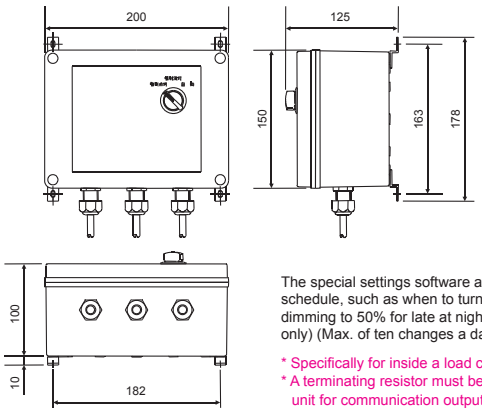
Dimming controller

ILSCON01A

(100 to 240V, 50/60Hz)

Specifications

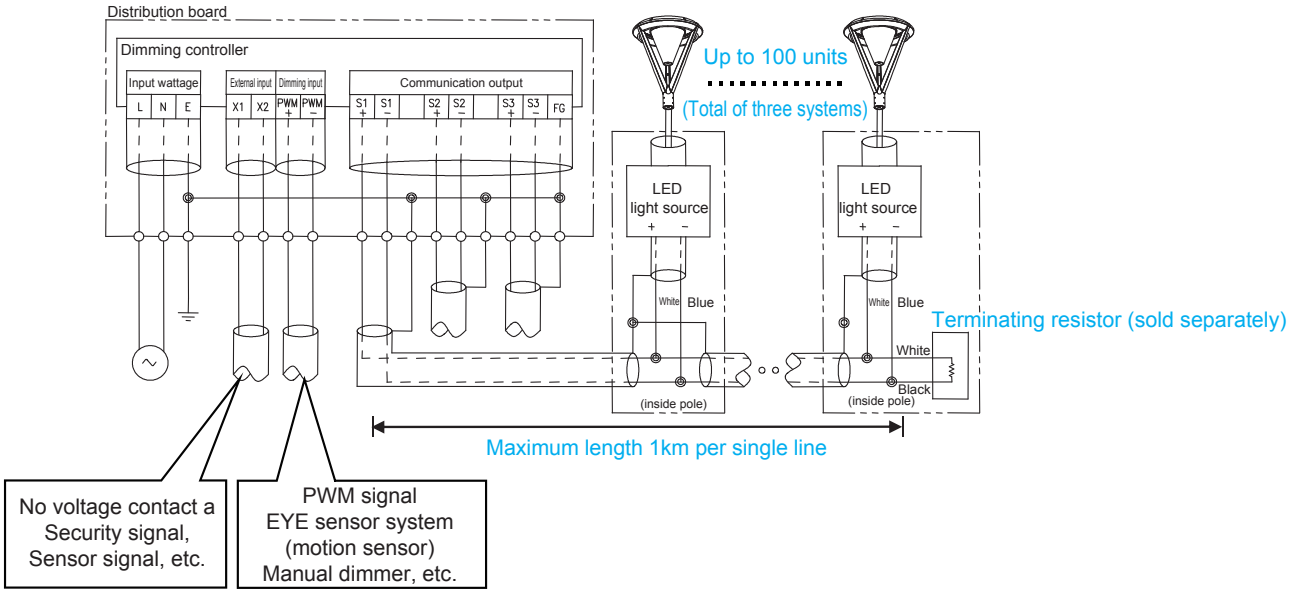
Body: ABS resin (white gray)
Bracket: Stainless
Weight: 2.0kg
Lead wire: 0.15m



The special settings software allows the use to set up a schedule, such as when to turn lighting on/off for the day, dimming to 50% for late at night or switching colors (type G only) (Max. of ten changes a day).

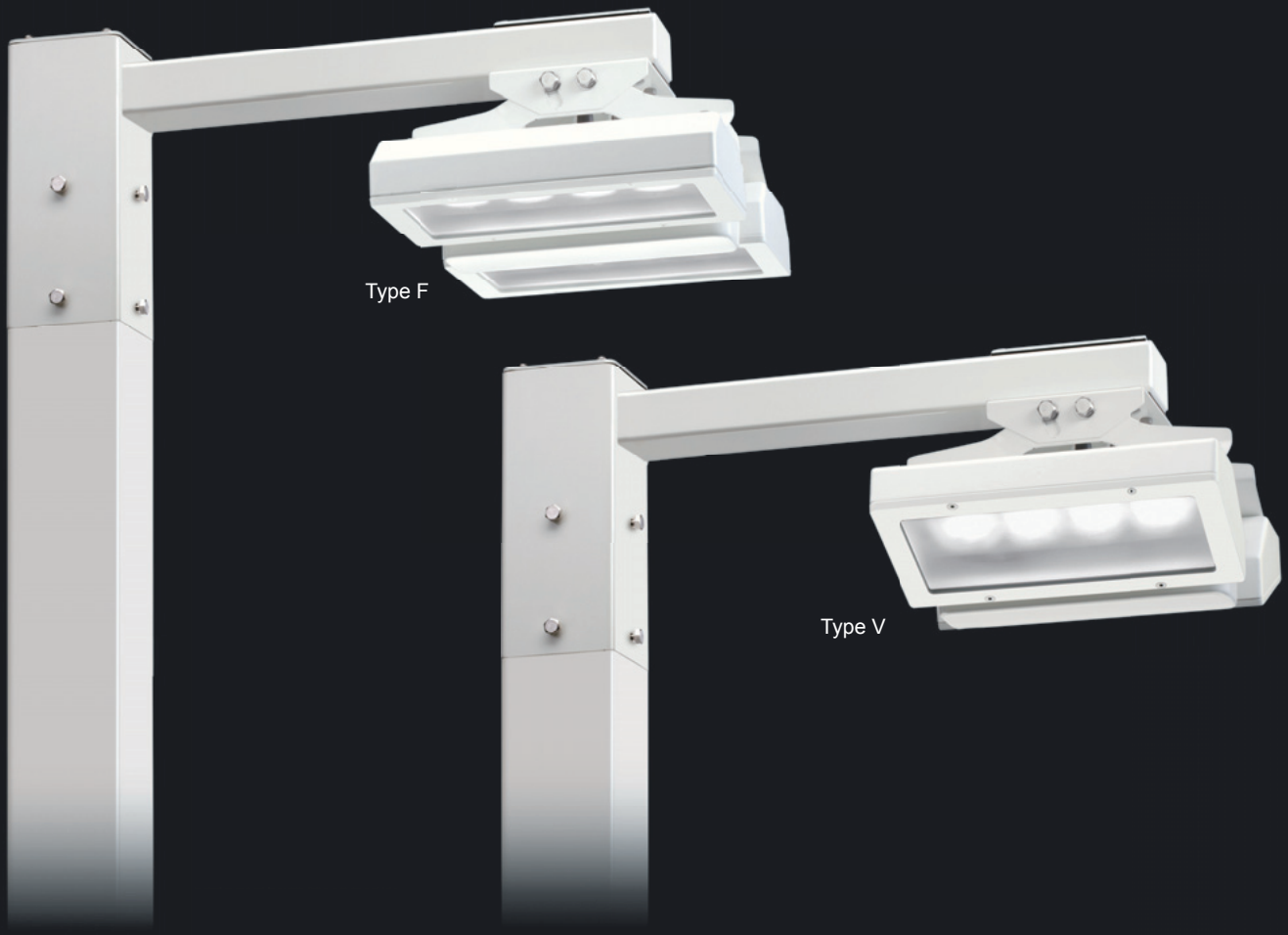
* Specifically for inside a load center. Cannot be used outdoors.
* A terminating resistor must be installed on the last power supply unit for communication output (type number ILSCON01A-R).

• Wiring diagram



LEDioc CEILING HB

Area lights Type F/Type V



Higher brightness than a 400W metal halide lamp
High-output: 20,000ℓm

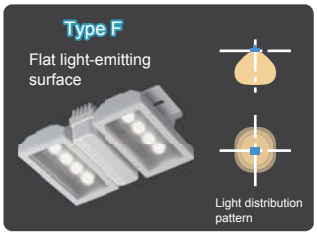
- Luminous efficacy: 105ℓm/W. Area luminaire with the industry's highest luminous efficacy
- As the luminaire comes in two types of shape, three types of beam distribution and is installed at an angle, it is easy to find a model that suits your application.

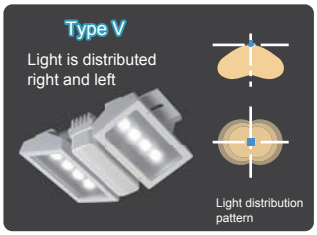
High efficacy of 105ℓm/W (daylight type)

The rated luminous flux (luminaire luminous flux) is 20,000ℓm and as an LED luminaire it possesses a luminous efficacy of 105ℓm/W, the highest in the industry.

Extensive Product Lineup

The LEDioc Ceiling Type F has a flat light-emitting surface that suppresses light pollution, while the Type V distributes light more widely to the right and left. Each comes in a lineup that features narrow, medium and wide beam distribution models. This allows you to select the model that best suits your needs.





Area light with swivel mount

The area light bracket allows you to install the luminaire at an angle of up to 30 degrees.

Special arm model: HA1001/HB

LEDioc CEILING HB initial luminous flux correction unit

By connecting the timer unit, which automatically dims the light in line with LED luminaire lumen maintenance, it dims it to the designed luminous flux when newly installed (approx. 70% of initial luminous flux) thus realizing energy savings. In addition, since this reduces the load on the LED and power supply unit, the service life of the LEDioc CEILING HB is extended up to 60,000hours (standard 40,000hours).

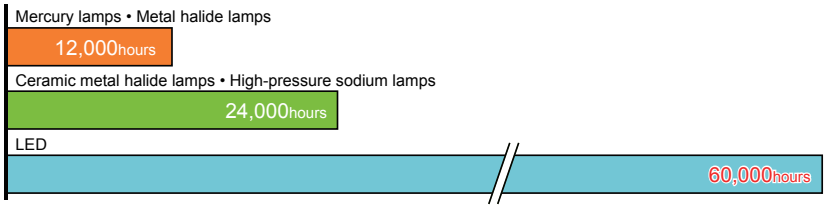
For LEDioc CEILING HB
Initial luminous flux correction unit
ILSDM02A-HB

- By connecting the applicable unit to a power supply synchronized with the LEDioc CEILING HB, it automatically counts the time in use and automatically controls the dimming ratio based on the cumulative time, dimming the luminaire.
- A maximum of 24 LEDioc CEILING HB luminaires can be connected per compatible unit.
- The maximum wire length of 200m can broaden the options for installation locations. (Signal wire: When using CPEVϕ0.9)
- Comples to IP65 for excellent water proof performance.
- Any position--unrestricted installation orientation.
- Power consumption of 3W makes for a true low-power control unit.

Long life of 60,000hours (when using initial luminous flux correction unit)

The LEDioc Ceiling light provides a LED module life of 60,000hours. It boasts a life that is more than 2.5 times that of an HID lamp, which contributes to substantial cost savings.

* When not a combination of a dimmable model and initial luminous flux correction unit, a LED module life is 40,000hours.



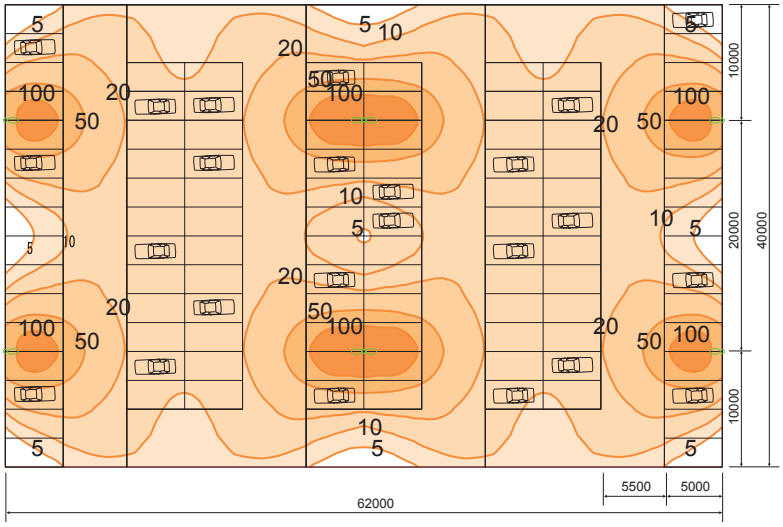
Low insect attraction

The LED emits hardly any light in the ultraviolet range that insects like and therefore attract fewers insects.

Comparison Example

HID lamp Area light (H804)
400W mercury lamp
(HF400X)

Average Illuminance
Driveway: 19.5ℓx
Garage: 30.4ℓx

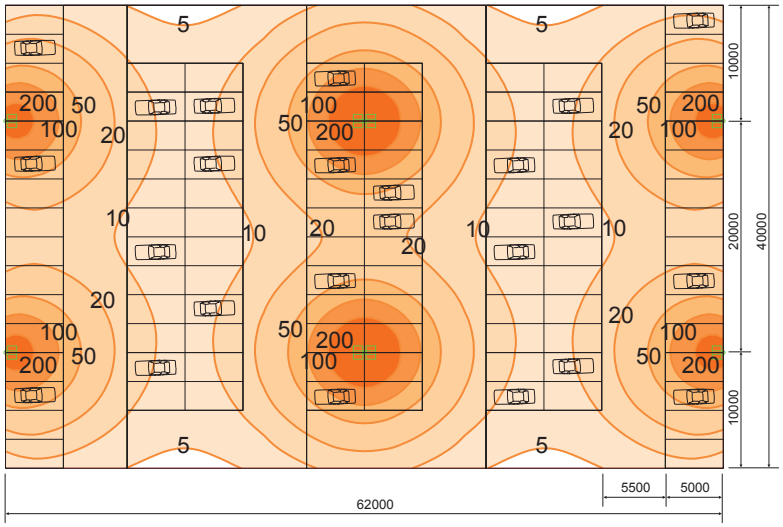


Design conditions: Installation height 4.5m, maintenance factor 0.76

Same brightness

LEDioc CEILING HB Area light Type F
High-output Wide beam
(EHCL19743N/SA1/2.4)

Average Illuminance
Driveway: 19.2ℓx
Garage: 52.3ℓx



Design conditions: Installation height 4.5m, maintenance factor 0.77

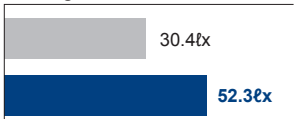
HID lamp Area light (H804)
400W mercury lamp
(HF400X)

LEDioc CEILING HB Area light Type F High-output (Wide beam)
(EHCL19743N/SA1/2.4)

Average illuminance (drive way)

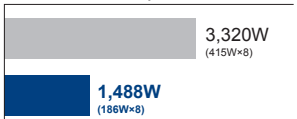
Same brightness

Average illuminance (garage)



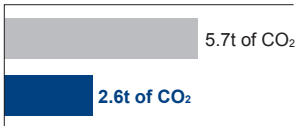
About 1.7 times as bright

Power consumption*1



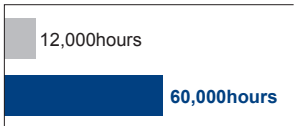
55% energy savings

Annual CO_2 Emissions*2



About a 3.1t reduction in CO_2

Lifetime

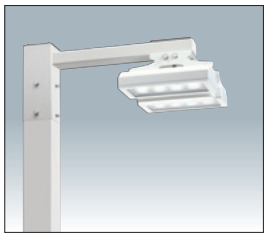


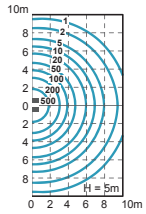
5 times

*1 Power consumption for a 200V mercury lamp (standard HPF ballast) and a LED lamp operating at 200V are shown.
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

Type F High-output

Narrow Beam





Weather-proof

EHCL19731N/SA1/2.4

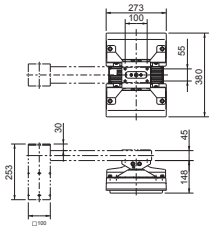
(Luminaire: EHCL19711N/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
20,000ℓm	190W (100V) 186W (200V) 185W (240V)

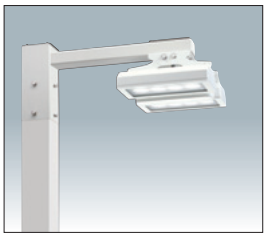
Luminous Efficacy
105.3ℓm/W (100V) 107.5ℓm/W (200V) 108.1ℓm/W (240V)

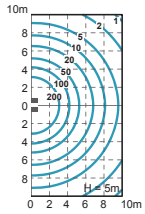
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	70

Specifications
Body: Diecast aluminum
Frame: Diecast aluminum
Front glass: Embossed glass
Bracket: Stainless
Finish color: White
Weight: 10.7kg
* Above characteristics are available at an ambient temperature of +25°C.
* Dimmable and/or light color equivalents of 4,000K and 3,000K have to be special ordered.



Medium Beam





Weather-proof

EHCL19732N/SA1/2.4

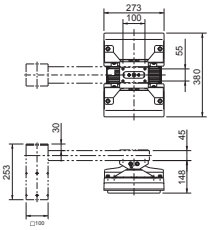
(Luminaire: EHCL19712N/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
20,000ℓm	190W (100V) 186W (200V) 185W (240V)

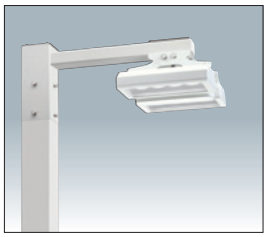
Luminous Efficacy
105.3ℓm/W (100V) 107.5ℓm/W (200V) 108.1ℓm/W (240V)

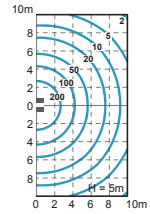
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	70

Specifications
Body: Diecast aluminum
Frame: Diecast aluminum
Front glass: Embossed glass
Bracket: Stainless
Finish color: White
Weight: 10.7kg
* Above characteristics are available at an ambient temperature of +25°C.
* Dimmable and/or light color equivalents of 4,000K and 3,000K have to be special ordered.



Wide beam





Weather-proof

EHCL19733N/SA1/2.4

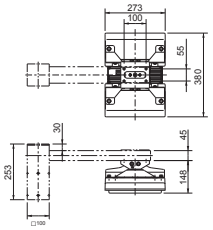
(Luminaire: EHCL19713N/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
20,000ℓm	190W (100V) 186W (200V) 185W (240V)

Luminous Efficacy
105.3ℓm/W (100V) 107.5ℓm/W (200V) 108.1ℓm/W (240V)

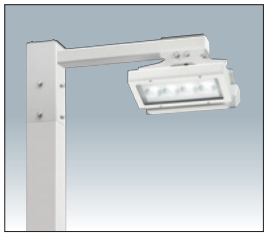
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	70

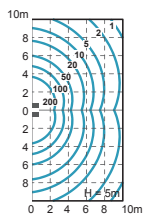
Specifications
Body: Diecast aluminum
Frame: Diecast aluminum
Front glass: Embossed glass
Bracket: Stainless
Finish color: White
Weight: 10.7kg
* Above characteristics are available at an ambient temperature of +25°C.
* Dimmable and/or light color equivalents of 4,000K and 3,000K have to be special ordered.



Type V High-output

Narrow beam





Weather-proof

EHCL19741N/SA1/2.4

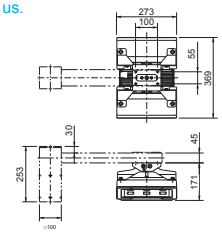
(Luminaire: EHCL19721N/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
20,000ℓm	190W (100V) 186W (200V) 185W (240V)

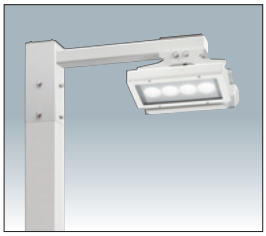
Luminous Efficacy
105.3ℓm/W (100V) 107.5ℓm/W (200V) 108.1ℓm/W (240V)

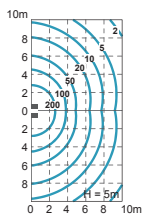
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	70

Specifications
Body: Diecast aluminum
Frame: Diecast aluminum
Front glass: Embossed glass
Bracket: Stainless
Finish color: White
Weight: 10.7kg
* Above characteristics are available at an ambient temperature of +25°C.
* Dimmable and/or light color equivalents of 4,000K and 3,000K have to be special ordered.
* Dimmable types can made to special order, so please contact us.



Medium beam





Weather-proof

EHCL19742N/SA1/2.4

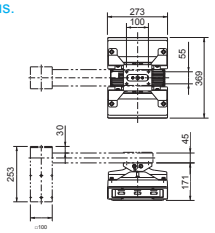
(Luminaire: EHCL19722N/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
20,000ℓm	190W (100V) 186W (200V) 185W (240V)

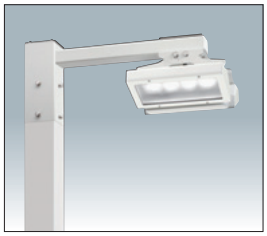
Luminous Efficacy
105.3ℓm/W (100V) 107.5ℓm/W (200V) 108.1ℓm/W (240V)

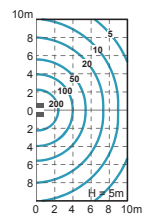
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	70

Specifications
Body: Diecast aluminum
Frame: Diecast aluminum
Front glass: Embossed glass
Bracket: Stainless
Finish color: White
Weight: 10.7kg
* Above characteristics are available at an ambient temperature of +25°C.
* Dimmable and/or light color equivalents of 4,000K and 3,000K have to be special ordered.
* Dimmable types can made to special order, so please contact us.



Wide beam





Weather-proof

EHCL19743N/SA1/2.4

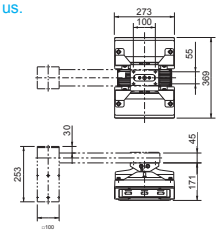
(Luminaire: EHCL19723N/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
20,000ℓm	190W (100V) 186W (200V) 185W (240V)

Luminous Efficacy
105.3ℓm/W (100V) 107.5ℓm/W (200V) 108.1ℓm/W (240V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	70

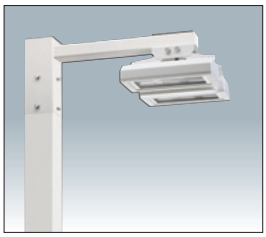
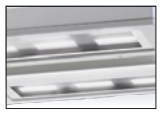
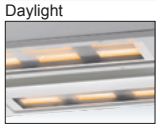
Specifications
Body: Diecast aluminum
Frame: Diecast aluminum
Front glass: Embossed glass
Bracket: Stainless
Finish color: White
Weight: 10.7kg
* Above characteristics are available at an ambient temperature of +25°C.
* Dimmable and/or light color equivalents of 4,000K and 3,000K have to be special ordered.
* Dimmable types can made to special order, so please contact us.



* The horizontal plane illumination distribution diagram above indicates initial values (unit: ℓx).

Type F Standard

Narrow beam



Daylight

Warm white

Weather-proof

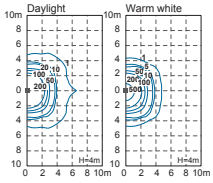
EHCL18731N/SA1/2.4 (Daylight)
(Body: EHCL18711N/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

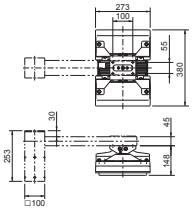
EHCL18731LW/SA1/2.4 (Warm white)
(Body: EHCL18711LW/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
10,900ℓm (Daylight), 7,750ℓm (Warm white)	180W
Luminous efficacy	**LED module life**
60.6ℓm/W (Daylight), 43.1ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

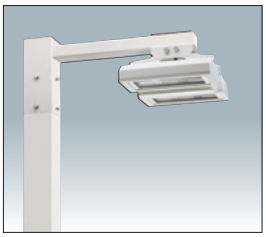
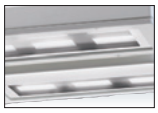
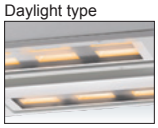
Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg





Medium beam



Daylight type

Warm white

Weather-proof

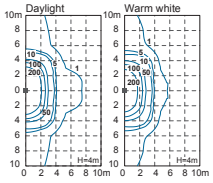
EHCL18732N/SA1/2.4 (Daylight)
(Body: EHCL18712N/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

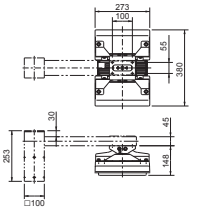
EHCL18732LW/SA1/2.4 (Warm white)
(Body: EHCL18712LW/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
12,300ℓm (Daylight), 8,740ℓm (Warm white)	180W
Luminous efficacy	**LED module life**
68.3ℓm/W (Daylight), 48.6ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

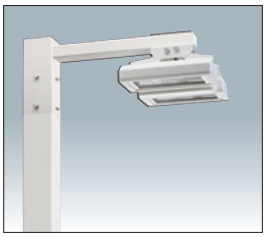
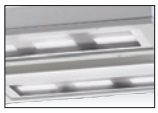
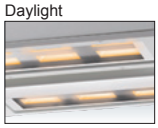
Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg





Wide beam



Daylight

Warm white

Weather-proof

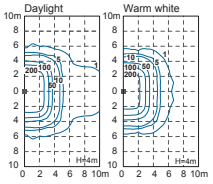
EHCL18733N/SA1/2.4 (Daylight)
(Body: EHCL18713N/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

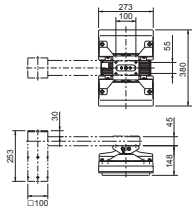
EHCL18733LW/SA1/2.4 (Warm white)
(Body: EHCL18713LW/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
13,600ℓm (Daylight), 9,660ℓm (Warm white)	180W
Luminous efficacy	**LED module life**
75.6ℓm/W (Daylight), 53.7ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

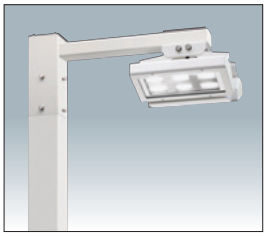
Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg





Type V Standard

Narrow beam



Daylight

Warm white

Weather-proof

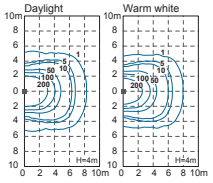
EHCL18741N/SA1/2.4 (Daylight)
(Body: EHCL18721N/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

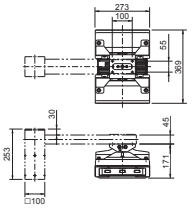
EHCL18741LW/SA1/2.4 (Warm white)
(Body: EHCL18721LW/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
11,930ℓm (Daylight), 8,470ℓm (Warm white)	180W
Luminous efficacy	**LED module life**
66.3ℓm/W (Daylight), 47.1ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

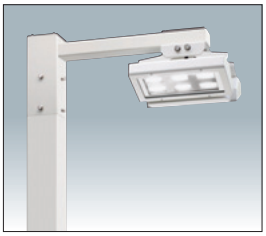
Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg





Medium beam



Daylight

Warm white

Weather-proof

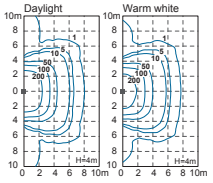
EHCL18742N/SA1/2.4 (Daylight)
(Body: EHCL18722N/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

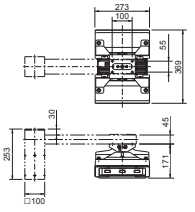
EHCL18742LW/SA1/2.4 (Warm white)
(Body: EHCL18722LW/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
13,320ℓm (Daylight), 9,460ℓm (Warm white)	180W
Luminous efficacy	**LED module life**
74.0ℓm/W (Daylight), 52.6ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

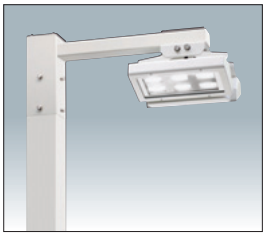
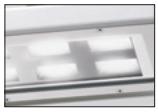
Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg





Wide beam



Daylight

Warm white

Weather-proof

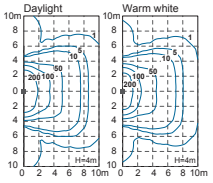
EHCL18743N/SA1/2.4 (Daylight)
(Body: EHCL18723N/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

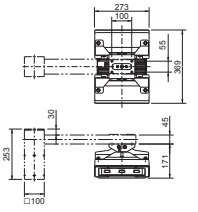
EHCL18743LW/SA1/2.4 (Warm white)
(Body: EHCL18723LW/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
13,800ℓm (Daylight), 9,800ℓm (Warm white)	180W
Luminous efficacy	**LED module life**
76.7ℓm/W (Daylight), 54.4ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg

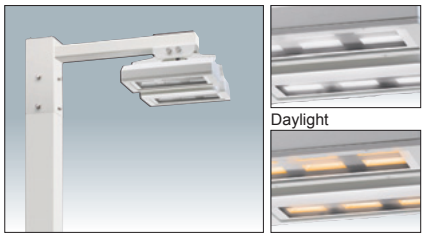




* The horizontal plane illumination distribution diagram above indicates initial values (unit: ℓx).

Type F Dimmable

Narrow beam



Weather-proof

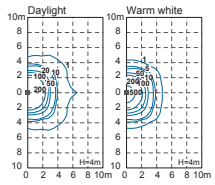
EHCL18731DN/SA1/2.4 (Daylight)
(Body: EHCL18711DN/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

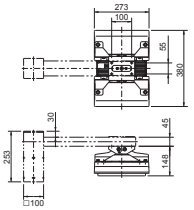
EHCL18731DLW/SA1/2.4 (Warm white)
(Body: EHCL18711DLW/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
10,900ℓm (Daylight), 7,750ℓm (Warm white)	180W
Luminous efficacy	**LED module life**
60.6ℓm/W (Daylight), 43.1ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

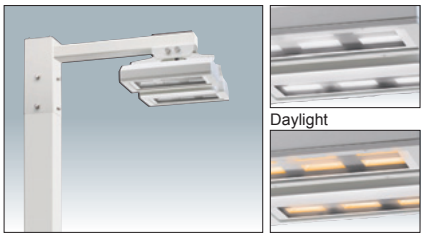
Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg





Medium beam



Weather-proof

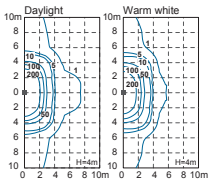
EHCL18732DN/SA1/2.4 (Daylight)
(Body: EHCL18712DN/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

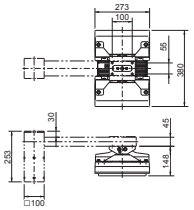
EHCL18732DLW/SA1/2.4 (Warm white)
(Body: EHCL18712DLW/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
12,300ℓm (Daylight), 8,740ℓm (Warm white)	180W
Luminous efficacy	**LED module life**
68.3ℓm/W (Daylight), 48.6ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

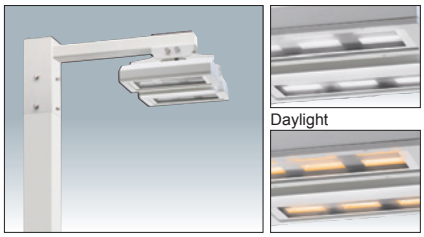
Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg





Wide beam



Weather-proof

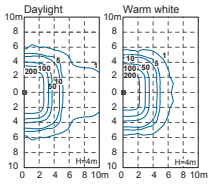
EHCL18733DN/SA1/2.4 (Daylight)
(Body: EHCL18713DN/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

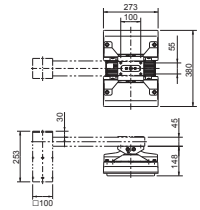
EHCL18733DLW/SA1/2.4 (Warm white)
(Body: EHCL18713DLW/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
13,600ℓm (Daylight), 9,660ℓm (Warm white)	180W
Luminous efficacy	**LED module life**
75.6ℓm/W (Daylight), 53.7ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

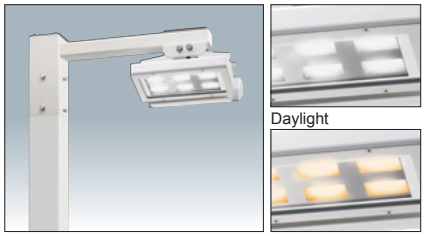
Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg





Type V Dimmable

Narrow beam



Weather-proof

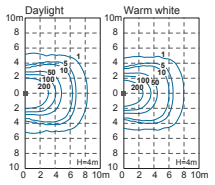
EHCL18741DN/SA1/2.4 (Daylight)
(Body: EHCL18721DN/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

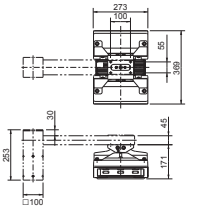
EHCL18741DLW/SA1/2.4 (Warm white)
(Body: EHCL18721DLW/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
11,930ℓm (Daylight), 8,470ℓm (Warm white)	180W
Luminous efficacy	**LED module life**
66.3ℓm/W (Daylight), 47.1ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

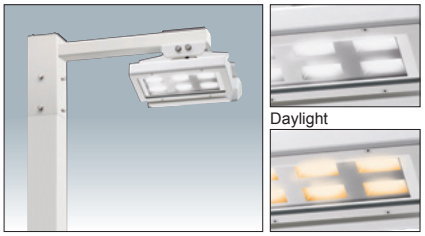
Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg





Medium beam



Weather-proof

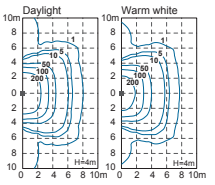
EHCL18742DN/SA1/2.4 (Daylight)
(Body: EHCL18722DN/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

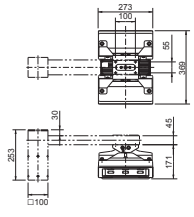
EHCL18742DLW/SA1/2.4 (Warm white)
(Body: EHCL18722DLW/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
13,320ℓm (Daylight), 9,460ℓm (Warm white)	180W
Luminous efficacy	**LED module life**
74.0ℓm/W (Daylight), 52.6ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

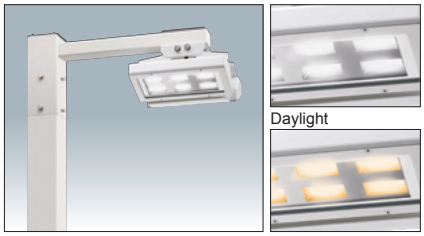
Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg





Wide beam



Weather-proof

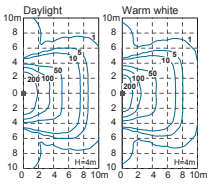
EHCL18743DN/SA1/2.4 (Daylight)
(Body: EHCL18723DN/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

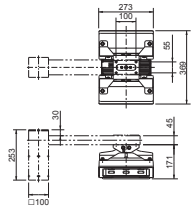
EHCL18743DLW/SA1/2.4 (Warm white)
(Body: EHCL18723DLW/SA1/2.4-0 + bracket: AEHCL12)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
13,800ℓm (Daylight), 9,800ℓm (Warm white)	180W
Luminous efficacy	**LED module life**
76.7ℓm/W (Daylight), 54.4ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg





* The horizontal plane illumination distribution diagram above indicates initial values (unit: ℓx).
* The LED module has a 60,000-hour life when combined with an initial luminous flux correction unit (ILSDM02A-HB).

Eyebird
Solar powered LED light

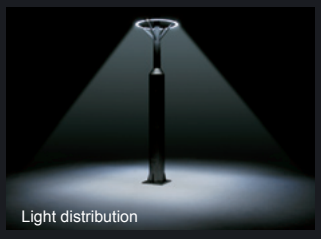
provides light from green energy.

- Eyebird is combined with an interconnected pole light, allowing a single power generation system to operate two luminaires.
- Use of LEDs allows more creative freedom making it easier to design attractive luminaires.
- Features our unique high-luminance reflective LEDs for excellent light distribution control, long life and reduced maintenance.

ARCO type

The LED unit is configured from compact, low-power LED modules. The resulting white ring of light adds a touch of fantasy to the surroundings.

Material	Steel plate
Power supply unit	Internal DC/DC converter
Rated current of power supply unit	1.2A (12V DC)

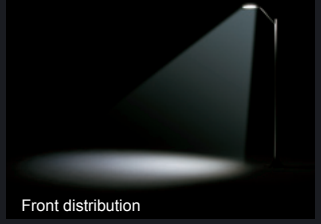


Light distribution

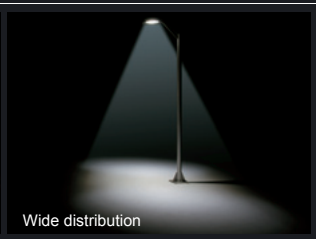
CELENE type

The slim compact Selene type luminaire lineup is comprised of two types: a wide distribution type that spreads light all around and a front distribution type that distributes light forward.

Material	Body: Diecast aluminum
	Arm: Steel plate
Power supply unit	Internal DC/DC converter
Rated current of power supply unit	1.2A (12V DC)



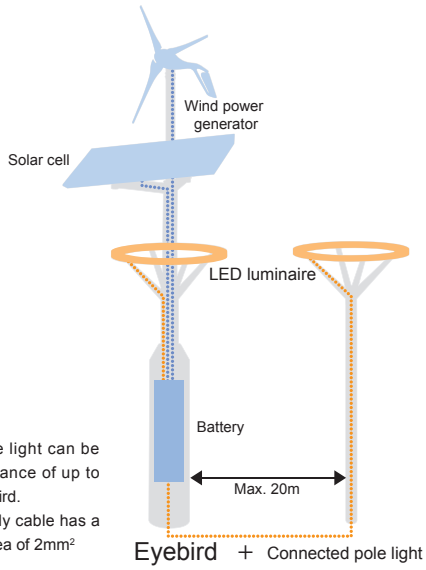
Front distribution



Wide distribution

Eyebird for simultaneous lighting and connected pole lights

Eyebird is a power-generating lumnaire that uses a highly efficient solar cell and high-power wind generator to supply two luminaires with power. In addition to the luminaire installed in Eyebird, it can supply power to a pole light of the same design and is thus able to light two lamps. This power-generating capability eliminates the need to build a power generation system where light is needed, which means installation harmonizes with the surroundings and saves energy. For example, a connected pole light can be installed in a location where there is little sunlight in the daytime if Eyebird is installed in a sunny spot.



A connected pole light can be installed at a distance of up to 20m (*) from Eyebird.
* The power supply cable has a cross-sectional area of 2mm²

Wind power generator

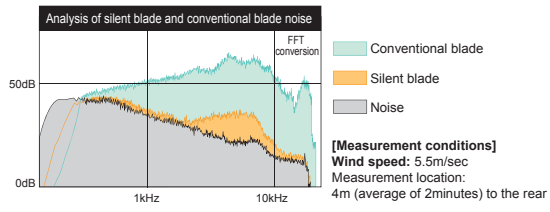
• Power assist function
When there is no wind, this function automatically turns the rotor 6seconds of every minute to better utilize any wind that comes along. In winter, it prevents the device from freezing up.

• Safety design
Safety design slows down (stall operation) the rotor at wind speeds of 15m/sec and stops it at 20m/sec and stronger winds. When the battery is fully charged, a safety circuit stops the rotor to prevent overcharging and reduce the impact on the device. A diecast aluminum unibody construction, the generator and rotor are sturdily built for safe operation.

• Silent blade
A special surface treatment of the blade lowers noise (wind noise) by 32dB making quiet operation possible.
(wind speed: 6.5m/s, location of measurement: 10m below)

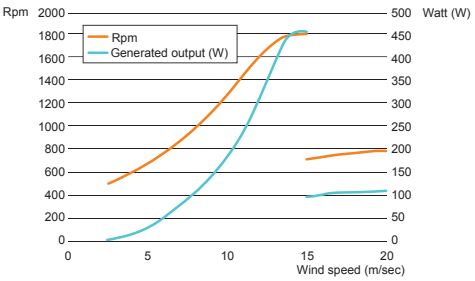
Comparing noise levels of silent and conventional blades	Average noise level
Conventional blade	62dB
Silent blade	32dB

Measurement condition: Wind speed: 6.5m/s, location of measurement: 10m below



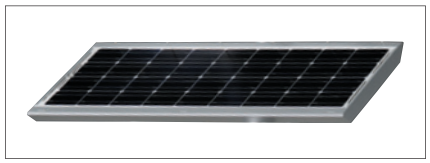
[Measurement conditions]
Wind speed: 5.5m/sec
Measurement location:
4m (average of 2minutes) to the rear

Electricity generation characteristics



Solar cell

Both systems use high-power output single-crystal silicon modules (rated output of 85W × 1 per interconnected system and 23W × 2 per independent system).


85W silicon module


23W silicon module

Control part c/w pole

• Pole Lights
Made from round steel tubing, the entire Eyebird structure is strong enough to withstand up to 60m/sec winds. The control part and battery case are integrated into the pole for a slim design that enhances functionality. A joint in the solar cell enables orientation adjustments after installation. Thus there is no need to adjust angle of orientation during basic installation work.

• Control part
The difference in power generating capacity of the solar cell helps the control part to determine whether it is day or night allowing it to automatically light the LED luminaire. Light goes out automatically at a set time or a safety circuit turns off the luminaire when battery voltage becomes very low to extend battery life. The two power generating systems then raise the battery voltage and the light is automatically relit to brighten up the night. A test switch is provided to enable service personnel to check the luminaire in the daytime.

[Major control part functions]

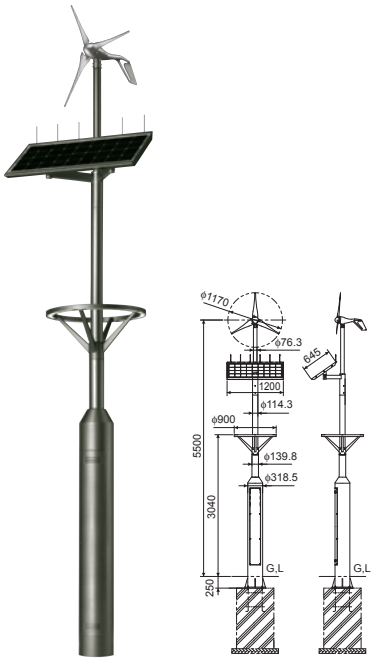
• Over discharge protection function
When the battery voltage goes below 11.5V, power supply is stopped to protect the battery. As charging raises battery voltage to 13.5V or more, the battery again starts supplying power automatically.

• Battery
We use a compact control seal lead battery for cyclic use. Since there is no need to refill water and the battery has a life of 7 to 10years, it considerably reduces maintenance work.

Optional products

- **Can be combined with a commercial power supply**
- **100V AC output**
- **Power generation indication system**
- **Wind direction and speed meter**
- **Clock, etc.**

Eyebird Arco type



12-hour on type

HTLE1511ER-H-2

Weather-proof **Standard model**

HTLE1541ER-H-2

Weather-proof **Hot dip galvanizing model**

Maximum lighting time per day (Fully on, not dimmable)
When separately set: 12hours
When connected: 8hours
Battery capacitance: Five days worth

Specifications

Luminaire body: Steel plate
Wind power generator: Diecast aluminum
Finish color: Gunmetal gray

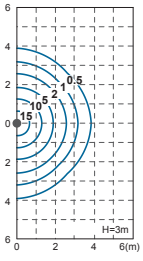
HTLE1511ER-H-2
Solar cell module mounting: Steel plate
Pole: Steel tube (painted after rust-proofing)

HTLE1541ER-H-2
Solar cell module mounting: Stainless
Pole: Steel tube (painted after hot dip galvanizing)

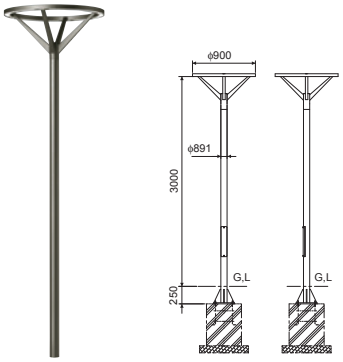
Anchor bolt: ANC243050

Light distribution pattern
Omnidirectional

Upward luminous flux ratio
0%



Eyebird Arco type



Connected pole light

HTLR911

Weather-proof **Standard model**

HTLR941

Weather-proof **Hot dip galvanizing model**

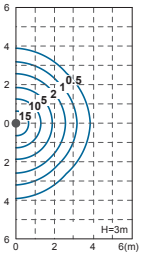
Specifications

Luminaire body: Steel plate
Finish color: Gunmetal gray
Pole: Steel tube (corrosion-proof urethane resin paint)

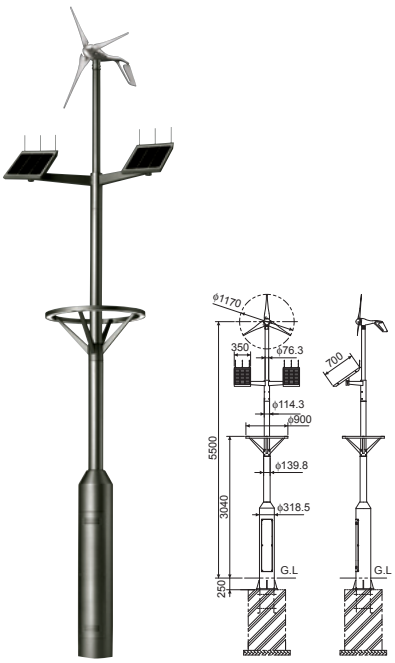
* The Eyebird Arco type is designed to be used connected to the HTLE1511ER-H-2 or HTLE1541ER-H-2.

Light distribution pattern
Omnidirectional

Upward luminous flux ratio
0%



Eyebird Arco type



8-hour on type

HTLE1511ER

Weather-proof **Standard model**

HTLE1541ER

Weather-proof **Hot dip galvanizing model**

Maximum lighting time per day: 8hours (Fully on, not dimmable)
Battery capacitance: Five days worth

Specifications

Luminaire body: Steel plate
Wind power generator: Diecast aluminum
Finish color: Gunmetal gray

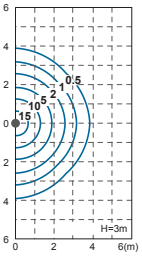
HTLE1511ER
Solar cell module mounting: Steel plate
Pole: Steel tube (painted after rust-proofing)

HTLE1541ER
Solar cell module mounting: Stainless
Pole: Steel tube (painted after hot dip galvanizing)

Anchor bolt: ANC243050

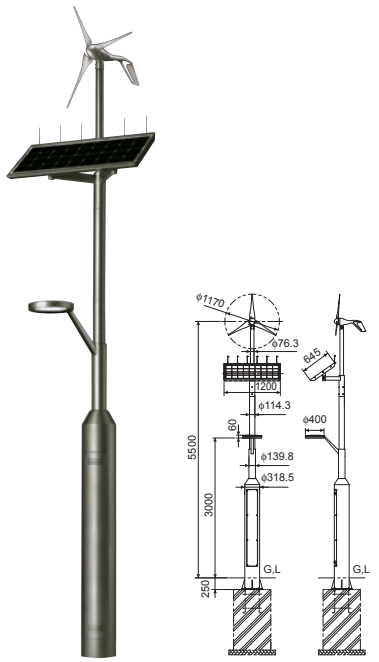
Light distribution pattern
Omnidirectional

Upward luminous flux ratio
0%



* The horizontal plane illumination distribution diagram above indicates initial values (unit: ℓx).
* The foundation drawing in the dimension drawing is for standard concrete foundation (reference).

Eyebird Celene type



12-hour on type

HTLE1011EDF-H-2 (front distribution light)
HTLE1011EDW-H-2 (wide distribution light)

Weather-proof **Standard model**

HTLE1041EDF-H-2 (front distribution light)
HTLE1041EDW-H-2 (wide distribution light)

Weather-proof **Hot dip galvanizing model**

Maximum lighting time per day (Fully on, not dimmable)
When separately set: 12hours
When connected: 8hours
Battery capacitance: Five days worth

Specifications

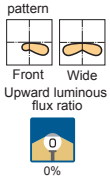
Luminaire body: Diecast aluminum
Wind power generator: Diecast aluminum
Finish color: Gunmetal gray

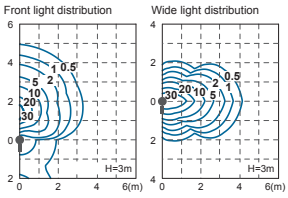
HTLE1011EDF-H-2, HTLE1011EDW-H-2
Solar cell module mounting: Steel plate
Pole: Steel tube (painted after rust-proofing)

HTLE1041EDF-H-2, HTLE1041EDW-H-2
Solar cell module mounting: Stainless
Pole: Steel tube (painted after hot dip galvanizing)

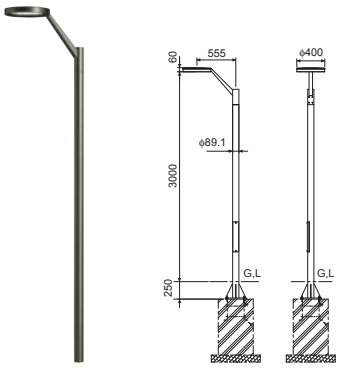
Anchor bolt: ANC243050

Light distribution pattern





Eyebird Celene type



Connected pole light

HTLD911F-2 (front distribution light)
HTLD911W-2 (wide distribution light)

Weather-proof **Standard model**
12V DC lighting

HTLD941F-2 (front distribution light)
HTLD941W-2 (wide distribution light)

Weather-proof **Hot dip galvanizing model**
12V DC lighting

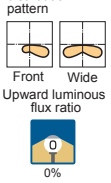
Specifications

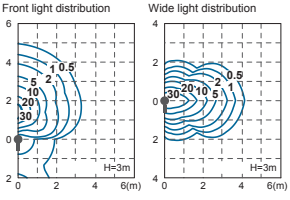
Luminaire body: Diecast aluminum
Finish color: Gunmetal gray
HTLD911F-2
HTLD911W-2
Pole: Steel tube (painted after rust-proofing)

HTLD941F-2
HTLD941W-2
Pole: Steel tube (painted after hot dip galvanizing)

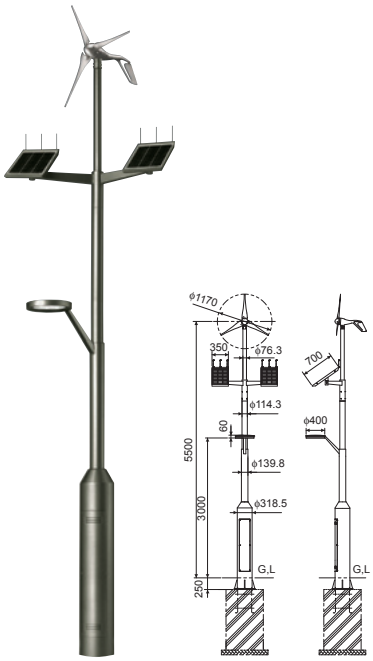
* The Eyebird Celene type is designed to be used connected to the HTLE1011EDF-H-2, HTLE1011EDW-H-2, HTLE1041EDF-H-2 or HTLE1041EDW-H-2.

Light distribution pattern





Eyebird Celene type



8-hour on type

HTLE1011EDF-2 (front distribution light)
HTLE1011EDW-2 (wide distribution light)

Weather-proof **Standard model**

HTLE1041EDF-2 (front distribution light)
HTLE1041EDW-2 (wide distribution light)

Weather-proof **Hot dip galvanizing model**

Maximum lighting time per day: 8hours (Fully on, not dimmable)
Battery capacitance: Five days worth

Specifications

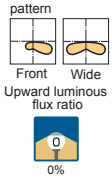
Luminaire body: Diecast aluminum
Wind power generator: Diecast aluminum
Finish color: Gunmetal gray

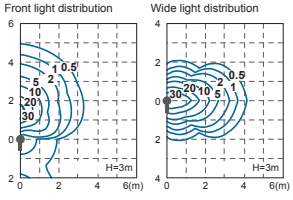
HTLE1011EDF-2, HTLE1011EDW-2
Solar cell module mounting: Steel plate
Pole: Steel tube (painted after rust-proofing)

HTLE1041EDF-2, HTLE1041EDW-2
Solar cell module mounting: Stainless
Pole: Steel tube (painted after hot dip galvanizing)

Anchor bolt: ANC243050

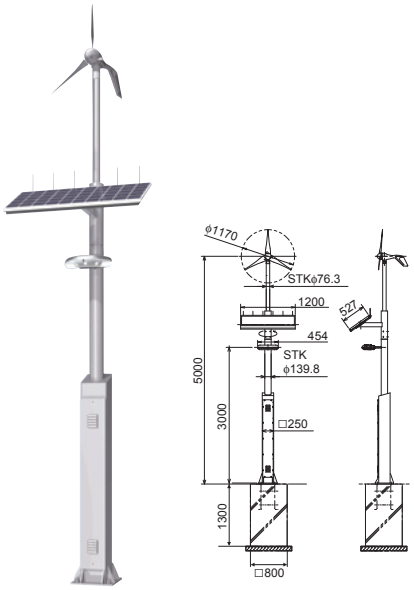
Light distribution pattern





* The horizontal plane illumination distribution diagram above indicates initial values (unit: ℓx).
* The foundation drawing in the dimension drawing is for standard concrete foundation (reference).

Eyebird LEDioc Street II type



LEDioc STREET type
8-hour on type

HTLE2011E-3

Weather-proof **Standard model**

HTLE2041E-3

Weather-proof **Hot dip galvanizing model**

Maximum lighting time per day: 8hours (Fully on, not dimmable)
Battery capacitance: Five days worth

Specifications

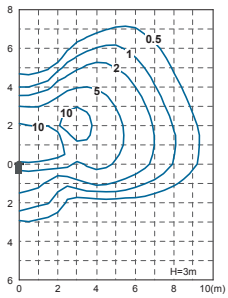
Luminaire body: Diecast aluminum
Wind power generator: Diecast aluminum
Finish color: Metallic silver

HTLE2011E-3
Solar cell module mounting: Steel plate
Pole: Steel tube (painted after rust-proofing)

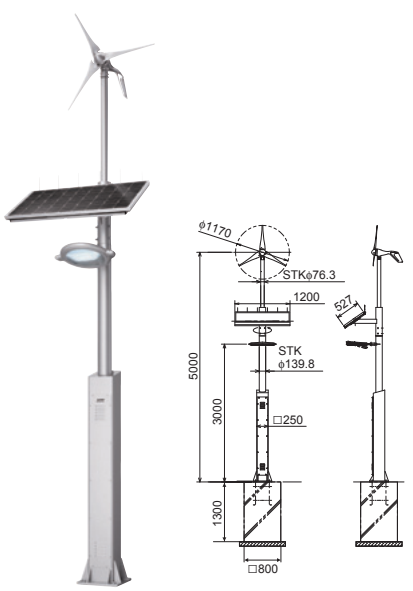
HTLE2041E-3
Solar cell module mounting: Stainless
Pole: Steel tube (painted after hot dip galvanizing)

Anchor bolt: ANC243050

Light distribution pattern: Wide
Upward luminous flux ratio: 5 (0-5%)



Eyebird



12-hour on type

HTLE1511EC-2

Weather-proof **Standard model**

HTLE1541EC-2

Weather-proof **Hot dip galvanizing model**

Maximum lighting time per day: 12hours (Fully on, not dimmable)
Battery capacitance: Five days worth

Specifications

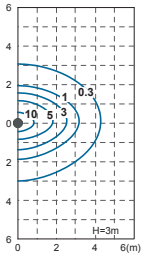
Luminaire body: Aluminum casting
Wind power generator: Diecast aluminum
Finish color: Metallic silver

HTLE1511EC-2
Solar cell module mounting: Steel plate
Pole: Steel tube (painted after rust-proofing)

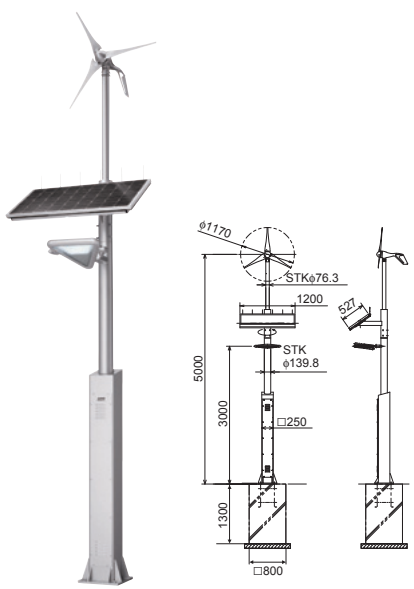
HTLE1541EC-2
Solar cell module mounting: Stainless
Pole: Steel tube (painted after hot dip galvanizing)

Anchor bolt: ANC243050

Light distribution pattern: Omnidirectional
Upward luminous flux ratio: 0 (0%)



Eyebird



12-hour on type

HTLE1511ET-2

Weather-proof **Standard model**

HTLE1541ET-2

Weather-proof **Hot dip galvanizing model**

Maximum lighting time per day: 12hours (Fully on, not dimmable)
Battery capacitance: Five days worth

Specifications

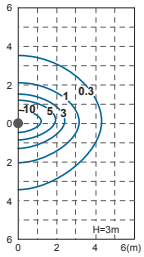
Luminaire body: Aluminum casting
Wind power generator: Diecast aluminum
Finish color: Metallic silver

HTLE1511ET-2
Solar cell module mounting: Steel plate
Pole: Steel tube (painted after rust-proofing)

HTLE1541ET-2
Solar cell module mounting: Stainless
Pole: Steel tube (painted after hot dip galvanizing)

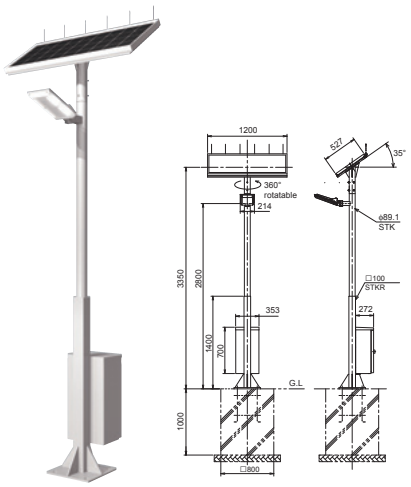
Anchor bolt: ANC243050

Light distribution pattern: Omnidirectional
Upward luminous flux ratio: 0 (0%)



* The horizontal plane illumination distribution diagram above indicates initial values (unit: ℓx).
* The foundation drawing in the dimension drawing is for standard concrete foundation (reference).

Solar powered LED light, LEDioc STREET 40VA type



8-hour on type

TLE4045LS40

Weather-proof **Hot dip galvanizing model**

Maximum lighting time per day: 8hours (Fully on, not dimmable)

Battery capacitance: Five days worth

Specifications

Luminaire body: Diecast aluminum

Finish color: Metallic silver

Solar cell module mounting: Stainless

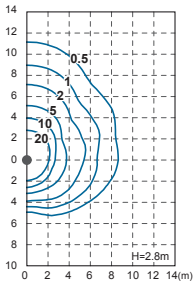
Battery box: Stainless

Pole: Steel tube (painted after hot dip galvanizing)

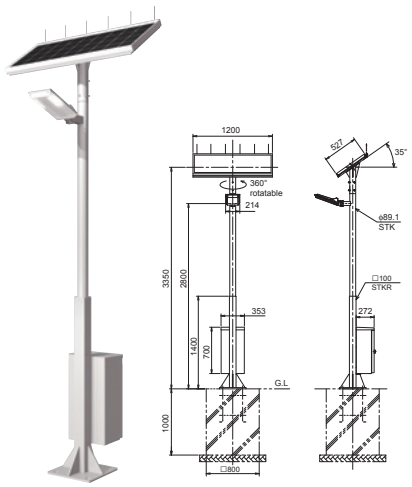
Anchor bolt: ANC243050

Light distribution pattern: Omnidirectional

Upward luminous flux ratio: 5 (0-5%)



Solar powered LED light, LEDioc STREET 20VA type



12-hour on type

TLE2045LS20

Weather-proof **Hot dip galvanizing model**

Maximum lighting time per day: 12hours (Fully on, not dimmable)

Battery capacitance: Five days worth

Specifications

Luminaire body: Diecast aluminum

Finish color: Metallic silver

Solar cell module mounting: Stainless

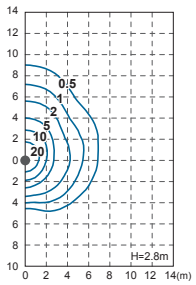
Battery box: Stainless

Pole: Steel tube (painted after hot dip galvanizing)

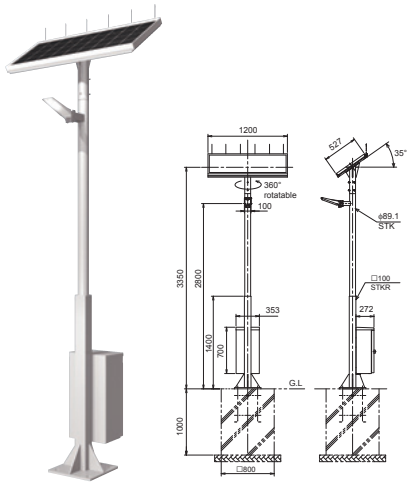
Anchor bolt: ANC243050

Light distribution pattern: Omnidirectional

Upward luminous flux ratio: 5 (0-5%)



Solar powered LED light, LEDioc STREET 10VA type



12-hour on type

TLE1045LS10-1

Weather-proof **Hot dip galvanizing model**

Maximum lighting time per day: 12hours (Fully on, not dimmable)

Battery capacitance: Five days worth

Specifications

Luminaire body: Diecast aluminum

Finish color: Metallic silver

Solar cell module mounting: Stainless

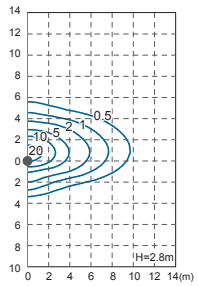
Battery box: Stainless

Pole: Steel tube (painted after hot dip galvanizing)

Anchor bolt: ANC243050

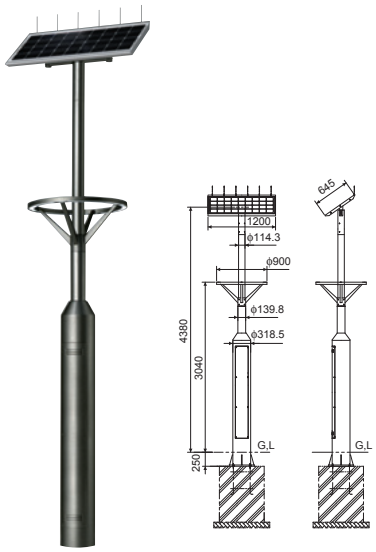
Light distribution pattern: Omnidirectional

Upward luminous flux ratio: 15 (5-15%)



* The horizontal plane illumination distribution diagram above indicates initial values (unit: ℓx).
* The foundation drawing in the dimension drawing is for standard concrete foundation (reference).

Solar powered LED light Arco type



12-hour on type

TLE1511ER-H-2

Weather-proof **Standard model**

TLE1541ER-H-2

Weather-proof **Hot dip galvanizing model**

Maximum lighting time per day (Fully on, not dimmable)
When separately set: 12hours
When connected: 8hours
Battery capacitance: Five days worth

Specifications

Luminaire body: Steel plate
Finish color: Gunmetal gray

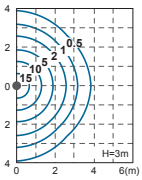
TLE1511ER-H-2
Solar cell module mounting: Steel plate
Battery box and pole: Steel tube (painted after rust-proofing)

TLE1541ER-H-2
Solar cell module mounting: Stainless
Battery box and pole: Steel tube (painted after hot dip galvanizing)

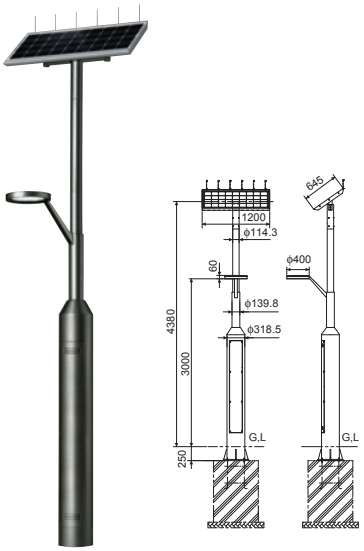
Anchor bolt: ANC243050

Light distribution pattern
Omnidirectional

Upward luminous flux ratio
0
0%



Solar powered LED light Celene type



12-hour on type

TLE1011EDF-H-2 (front distribution light)
TLE1011EDW-H-2 (wide distribution light)

Weather-proof **Standard model**

TLE1041EDF-H-2 (front distribution light)
TLE1041EDW-H-2 (wide distribution light)

Weather-proof **Hot dip galvanizing model**

Maximum lighting time per day (Fully on, not dimmable)
When separately set: 12hours
When connected: 8hours
Battery capacitance: Five days worth

Specifications

Luminaire body: Diecast aluminum
Finish color: Gunmetal gray

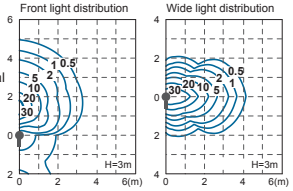
TLE1011EDF-H-2, TLE1011EDW-H-2
Solar cell module mounting: Steel plate
Battery box and pole: Steel tube (painted after rust-proofing)

TLE1041EDF-H-2, TLE1041EDW-H-2
Solar cell module mounting: Stainless
Battery box and pole: Steel tube (painted after hot dip galvanizing)

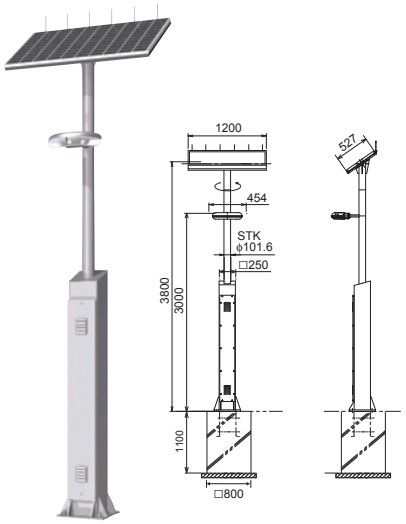
Anchor bolt: ANC243050

Light distribution pattern
Front Omnidirectional

Upward luminous flux ratio
0
0%



Solar powered LED light, LEDioc Street II type



8-hour on type

TLE2011-3

Weather-proof **Standard model**

TLE2041-3

Weather-proof **Hot dip galvanizing model**

Maximum lighting time per day: 8hours (Fully on, not dimmable)
Battery capacitance: Five days worth

Specifications

Luminaire body: Diecast aluminum
Finish color: Metallic silver

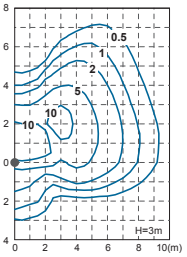
TLE2011-3
Solar cell module mounting: Steel plate
Battery box and pole: Steel tube (painted after rust-proofing)

TLE2041-3
Solar cell module mounting: Stainless
Battery box and pole: Steel tube (painted after hot dip galvanizing)

Anchor bolt: ANC243050

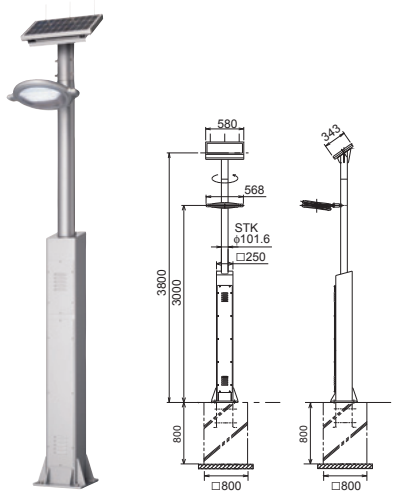
Light distribution pattern
Wide

Upward luminous flux ratio
5
0-5%



* The horizontal plane illumination distribution diagram above indicates initial values (unit: ℓx).
* The foundation drawing in the dimension drawing is for standard concrete foundation (reference).

Solar powered LED light



6-hour on type

TLE1511C

Weather-proof **Standard model**

TLE1541C

Weather-proof **Hot dip galvanizing model**

Maximum lighting time per day: 6hours (Fully on, not dimmable)
Battery capacitance: Five days worth

Specifications

Luminaire body: Aluminum casting
Finish color: Metallic silver

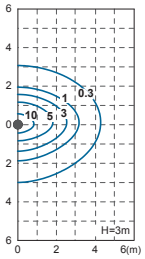
TLE1511C
Solar cell module mounting: Steel plate
Battery box and pole: Steel tube (painted after rust-proofing)

TLE1541C
Solar cell module mounting: Stainless
Battery box and pole: Steel tube (painted after hot dip galvanizing)

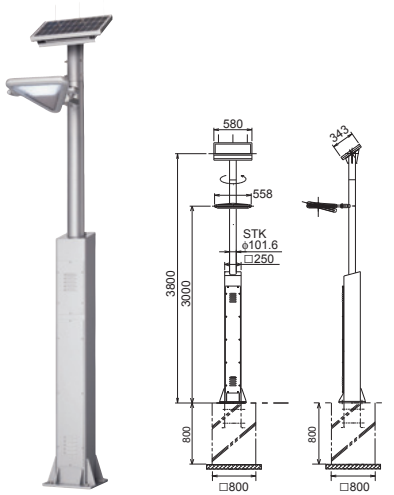
Anchor bolt: ANC243050

Light distribution pattern
Omnidirectional

Upward luminous flux ratio
0
0%



Solar powered LED light



6-hour on type

TLE1511T

Weather-proof **Standard model**

TLE1541T

Weather-proof **Hot dip galvanizing model**

Maximum lighting time per day: 6hours (Fully on, not dimmable)
Battery capacitance: Five days worth

Specifications

Luminaire body: Aluminum casting
Finish color: Metallic silver

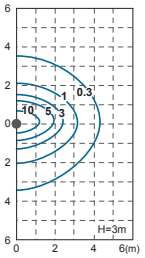
TLE1511T
Solar cell module mounting: Steel plate
Battery box and pole: Steel tube (painted after rust-proofing)

TLE1541T
Solar cell module mounting: Stainless
Battery box and pole: Steel tube (painted after hot dip galvanizing)

Anchor bolt: ANC243050

Light distribution pattern
Omnidirectional

Upward luminous flux ratio
0
0%



Notes regarding solar powered hybrid lights and solar powered lights

* Be sure to consult us regarding special applications outside of normal solar powered light applications, use in special environments and use in areas exposed to high concentrations of salt.
* Since solar powered lights use natural energy, they may not meet lighting time requirements depending on weather conditions. (Please consult us for details.)
* Charging capacity drops significantly when tree branches or other objects prevent sunlight from reaching the solar cell surface. Reduce the lighting time.
* Charging capacity drops when the solar cell surface becomes soiled. Clean the solar cell at least once a year.
* Check the specifications for details on service life.
* Maximum lighting time is the time lamps can be lit based on four effective hours of sunlight per day. Carefully select location of installation as it may not be possible to maintain rated hours if the solar cell does not receive enough sunlight. (Locations where shade can fall on the solar cell during the time frame of 9am to 3pm throughout the year.)
* Do not install solar cells where they may be exposed to light from street lights at night. Exposure to light from street lights may cause the solar cell to malfunction.
* The amount of solar insolation (or amount of wind generated electricity) varies with place of installation. Set a lighting time that is lower than the maximum lighting time that the place of installation can supply. Insufficient charging could shorten battery life or cause it to malfunction.

* The horizontal plane illumination distribution diagram above indicates initial values (unit: ℓx).
* The foundation drawing in the dimension drawing is for standard concrete foundation (reference).

Shin-Tomei Expressway, Hamamatsu Service Area
(LEDioc AREA Type D)

Shin-Tomei Expressway, Shizuoka Service Area
(LEDioc AREA mitis-B)

Oizumiryokuchi
(LEDioc AREA Type D)

Sapporo city, Maeda park
(LEDioc AREA Type G)

Hokkaido University Library's Media Court
(LEDioc AREA Type G)

Takashima Suisaisen Park
(LEDioc AREA TECHNORAY)

West exit line of Kumamoto Station
(LEDioc AREA mitis-B)

Yaoko Kawagoematoba shop
(LEDioc AREA mitis-D)

West Chiba Campus of Nationl University Corporation Chiba University
(LEDioc AREA Japanese type)

Metropolitan Expressway, Komagata Parking Area
(Solar powered LED light)

Shinkocho area on Japan National Route 116
(The Eyebird Arco type)

Kido Dam
(The Eyebird Arco type)

LEDioc
Underwater Luminaires

A 95W type provides the same brightness as an underwater luminaire with a 250W halogen lamp.
As LEDioc consumes only 62% as much power, it lowers CO_2 emissions.

Available for a variety of applications
- A lineup of 24 models including two brightness types 95W and 60W, two light colors and three light distribution types.
- Materials and paint are highly corrosion resistant.

Safety design
- Hermetically sealed case with an IP68 protection rating
- The power supply unit comes in a double insulation construction and the luminaire has a dual structure to reduce condensation.

Long life means less maintenance
- LED module life of up to 40,000hours. This reduces tricky underwater maintenance work.

Extensive and varied lineup

We offer a full lineup comprising 24 models that differ in brightness: 95W or 60W type brightness; in light color: Daylight or Warm White; light distribution variation: Narrow, medium and wide to provide high output power LED illumination for various lighting scenarios.

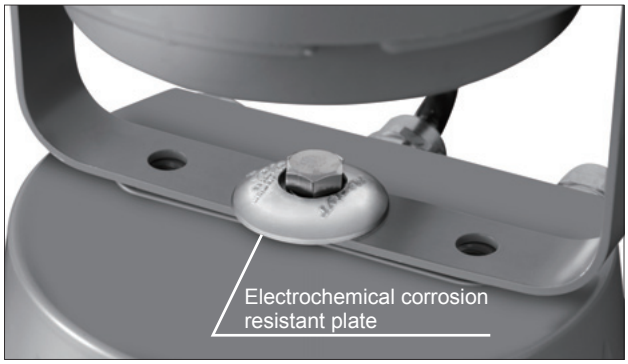
Type	Light color	Light distribution characteristics	Type number	Luminaire luminous flux	Axis candela	1/2 beam angle	Compatible power supply
95W Type	Equivalent to 5,000K (Daylight type)	Narrow beam	EW0724N/SA1/2.4 (E)	5500ℓm	13300cd	37°	Power supply voltage 100 to 240V AC Frequency 50/60Hz
		Medium beam	EW0725N/SA1/2.4 (E)	5600ℓm	6900cd	49°	
		Wide beam	EW0726N/SA1/2.4 (E)	5500ℓm	3500cd	78°	
	Equivalent to 3,000K (Warm white type)	Narrow beam	EW0724LW/SA1/2.4 (E)	3900ℓm	9500cd	37°	
		Medium beam	EW0725LW/SA1/2.4 (E)	4000ℓm	4900cd	49°	
		Wide beam	EW0726LW/SA1/2.4 (E)	3900ℓm	2500cd	78°	
60W Type	Equivalent to 5,000K (Daylight type)	Narrow beam	EW0524N/SA1/2.4 (E)	3600ℓm	8900cd	37°	
		Medium beam	EW0525N/SA1/2.4 (E)	3700ℓm	4600cd	49°	
		Wide beam	EW0526N/SA1/2.4 (E)	3700ℓm	2150cd	78°	
	Equivalent to 3,000K (Warm white type)	Narrow beam	EW0524LW/SA1/2.4 (E)	2600ℓm	6300cd	37°	
		Medium beam	EW0525LW/SA1/2.4 (E)	2650ℓm	3300cd	49°	
		Wide beam	EW0526LW/SA1/2.4 (E)	2650ℓm	1650cd	78°	

the Daylight and the Warm White types, the above models can also be offered in a single color type (blue, green and red). * "E" at the end of model indicates unit installation.

Use of highly corrosion resistant materials

The luminaire body and power supply unit case is made from ADC6, which has 8 times the corrosion resistance of ADC12. In addition, to prevent aluminum corrosion all screws are made from a corrosion resistant stainless material and an electrochemical corrosion resistant plate is used to guarantee long-term* use.

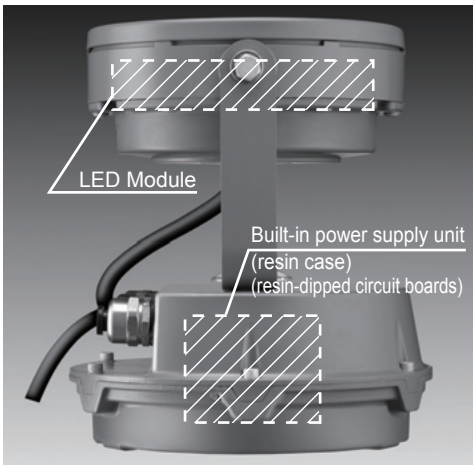
* Although the luminaires are highly corrosion resistant, regular inspections should be performed to guarantee long-term stable operation.



Advanced safety design

The power supply unit comes in a double insulation construction to ensure electrical safety. Also the LEDs in the luminaire feature a dual structure to prevent condensation.

* Input voltage should come through an isolation transformer.



Usable down to a depth of 2m below ground level

Hermetically sealed thanks to a complete enclosure that carries an IP68 protection rating, the luminaire can be installed in outdoor facilities down to a depth of 2m enabling lighting in a variety of locations.

* Cannot be used in pools or locations frequented by people. The luminaires could be damaged and pose an electric shock hazard.
* Use in water at temperatures lower than 35°C. It can be used outdoors in locations other than under water, but the ambient temperature must be 35°C or lower.

Long life

Compared to halogen lamps that have so far been used in under-water luminaires, LEDioc has an LED module life of 40,000hours or 20 times the 2,000-hour rated life of halogen lamps. This considerably reduces costs as underwater maintenance is difficult work.

Substantial energy saving lower CO_2 emissions

Comparison example

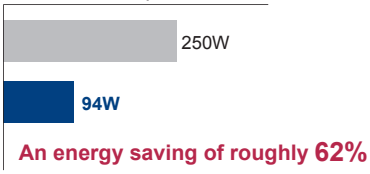
250W halogen lamp Underwater Luminaire
Narrow beam

LEDioc Underwater luminaire 95W type
(Narrow beam: Warm White EW0724LW/SA1/2.4)

250W halogen lamp Underwater Luminaire
Narrow beam

LEDioc Underwater luminaire 95W type
(Narrow beam: Warm White EW0724LW/SA1/2.4)

Power consumption*1

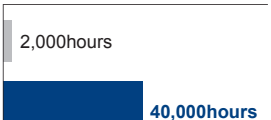


An energy saving of roughly 62%

Annual amount of CO_2 emissions*2

About 268.3kg reduction in CO_2

Lifetime

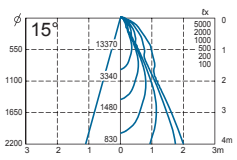


20 times

*1 The power consumption of halogen lamps is the input voltage at rated voltage input.
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

95W type

Narrow beam



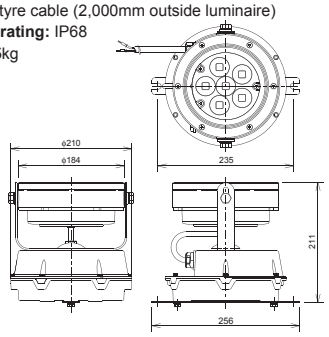
Underwater/outdoor

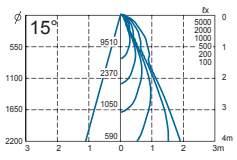
EW0724N/SA1/2.4 (For transmission)
EW0724N/SA1/2.4E (For unit installation)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
5,500ℓm	94W
Luminous efficacy	**LED module life**
58.5ℓm/W	40,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 5,000K (Daylight)	68

Specifications

Body: Diecast aluminum
Front panel: Tempered glass
Arm: Stainless
Bracket: Stainless
Cable: Cabtyre cable (2,000mm outside luminaire)
Protection rating: IP68
Weight: 6.5kg





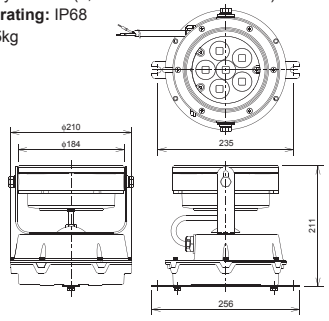
Underwater/outdoor

EW0724LW/SA1/2.4 (For transmission)
EW0724LW/SA1/2.4E (For unit installation)
(100 to 240V, 50/60Hz)

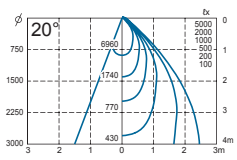
Rated luminous flux (luminaire luminous flux)	Power consumption
3,900ℓm	94W
Luminous efficacy	**LED module life**
41.5ℓm/W	40,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 3,000K (Warm white)	80

Specifications

Body: Diecast aluminum
Front panel: Tempered glass
Arm: Stainless
Bracket: Stainless
Cable: Cabtyre cable (2,000mm outside luminaire)
Protection rating: IP68
Weight: 6.5kg



Medium beam



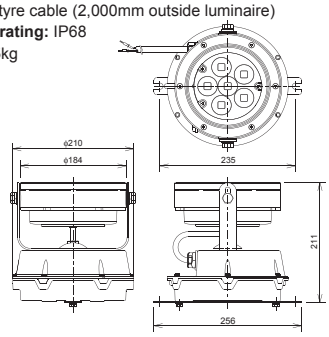
Underwater/outdoor

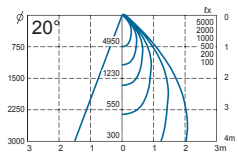
EW0725N/SA1/2.4 (For transmission)
EW0725N/SA1/2.4E (For unit installation)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
5,600ℓm	94W
Luminous efficacy	**LED module life**
59.6ℓm/W	40,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 5,000K (Daylight)	68

Specifications

Body: Diecast aluminum
Front panel: Tempered glass
Arm: Stainless
Bracket: Stainless
Cable: Cabtyre cable (2,000mm outside luminaire)
Protection rating: IP68
Weight: 6.5kg





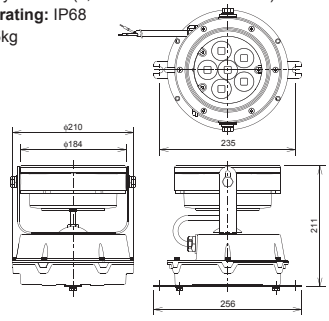
Underwater/outdoor

EW0725LW/SA1/2.4 (For transmission)
EW0725LW/SA1/2.4E (For unit installation)
(100 to 240V, 50/60Hz)

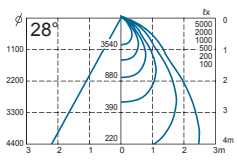
Rated luminous flux (luminaire luminous flux)	Power consumption
4,000ℓm	94W
Luminous efficacy	**LED module life**
42.6ℓm/W	40,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 3,000K (Warm white)	80

Specifications

Body: Diecast aluminum
Front panel: Tempered glass
Arm: Stainless
Bracket: Stainless
Cable: Cabtyre cable (2,000mm outside luminaire)
Protection rating: IP68
Weight: 6.5kg



Wide beam



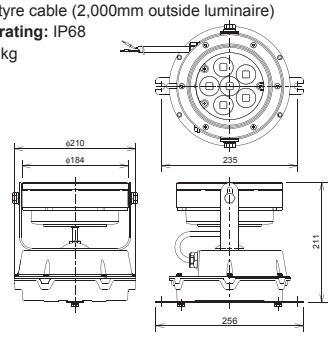
Underwater/outdoor

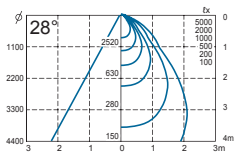
EW0726N/SA1/2.4 (For transmission)
EW0726N/SA1/2.4E (For unit installation)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
5,500ℓm	94W
Luminous efficacy	**LED module life**
58.5ℓm/W	40,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 5,000K (Daylight)	68

Specifications

Body: Diecast aluminum
Front panel: Tempered glass
Arm: Stainless
Bracket: Stainless
Cable: Cabtyre cable (2,000mm outside luminaire)
Protection rating: IP68
Weight: 6.5kg





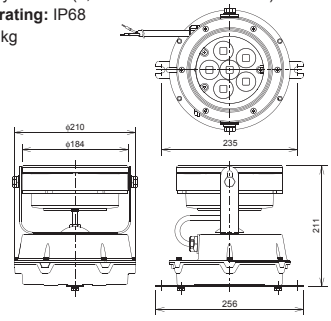
Underwater/outdoor

EW0726LW/SA1/2.4 (For transmission)
EW0726LW/SA1/2.4E (For unit installation)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
3,900ℓm	94W
Luminous efficacy	**LED module life**
41.5ℓm/W	40,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 3,000K (Warm white)	80

Specifications

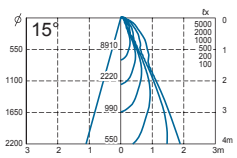
Body: Diecast aluminum
Front panel: Tempered glass
Arm: Stainless
Bracket: Stainless
Cable: Cabtyre cable (2,000mm outside luminaire)
Protection rating: IP68
Weight: 6.5kg



* The horizontal plane illumination distribution diagram above indicates initial values (unit: ℓx).
* The luminaires can also be provided in blue, green and red light color models.

60W type

Narrow beam



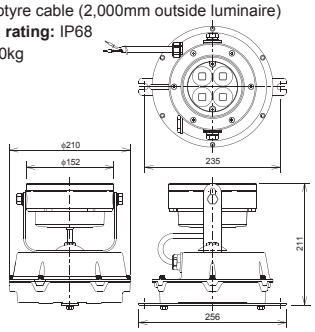
Underwater/outdoor

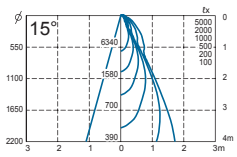
EW0524N/SA1/2.4 (For transmission)
EW0524N/SA1/2.4E (For unit installation)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
3,600ℓm	60W
Luminous efficacy	**LED module life**
60.0ℓm/W	40,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 5,000K (Daylight)	68

Specifications

Body: Diecast aluminum
Front panel: Tempered glass
Arm: Stainless
Bracket: Stainless
Cable: Cabtyre cable (2,000mm outside luminaire)
Protection rating: IP68
Weight: 6.0kg





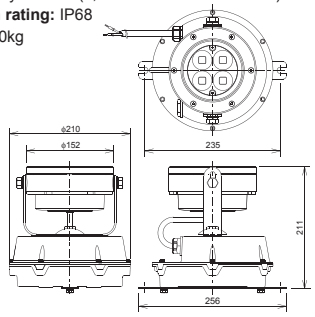
Underwater/outdoor

EW0524LW/SA1/2.4 (For transmission)
EW0524LW/SA1/2.4E (For unit installation)
(100 to 240V, 50/60Hz)

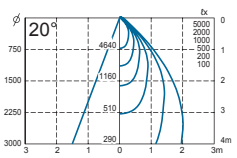
Rated luminous flux (luminaire luminous flux)	Power consumption
2,600ℓm	60W
Luminous efficacy	**LED module life**
43.3ℓm/W	40,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 3,000K (Warm white)	80

Specifications

Body: Diecast aluminum
Front panel: Tempered glass
Arm: Stainless
Bracket: Stainless
Cable: Cabtyre cable (2,000mm outside luminaire)
Protection rating: IP68
Weight: 6.0kg



Medium beam



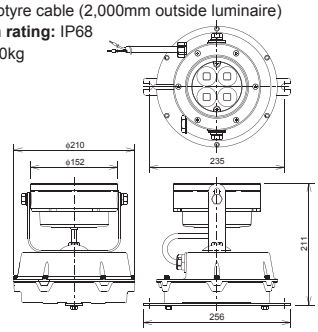
Underwater/outdoor

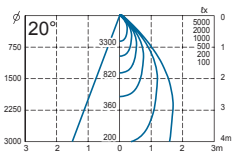
EW0525N/SA1/2.4 (For transmission)
EW0525N/SA1/2.4E (For unit installation)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
3,700ℓm	60W
Luminous efficacy	**LED module life**
61.7ℓm/W	40,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 5,000K (Daylight)	68

Specifications

Body: Diecast aluminum
Front panel: Tempered glass
Arm: Stainless
Bracket: Stainless
Cable: Cabtyre cable (2,000mm outside luminaire)
Protection rating: IP68
Weight: 6.0kg





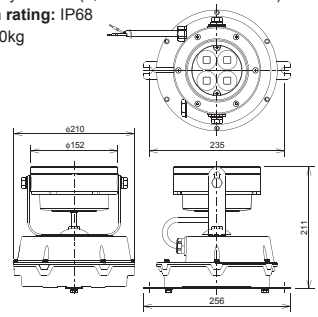
Underwater/outdoor

EW0525LW/SA1/2.4 (For transmission)
EW0525LW/SA1/2.4E (For unit installation)
(100 to 240V, 50/60Hz)

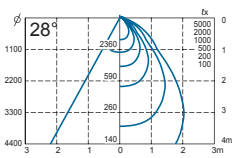
Rated luminous flux (luminaire luminous flux)	Power consumption
2,650ℓm	60W
Luminous efficacy	**LED module life**
44.2ℓm/W	40,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 3,000K (Warm white)	80

Specifications

Body: Diecast aluminum
Front panel: Tempered glass
Arm: Stainless
Bracket: Stainless
Cable: Cabtyre cable (2,000mm outside luminaire)
Protection rating: IP68
Weight: 6.0kg



Wide beam



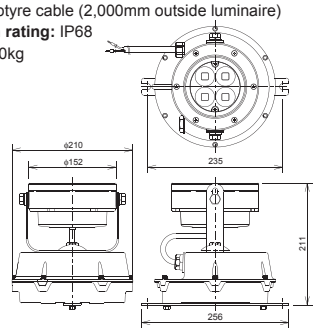
Underwater/outdoor

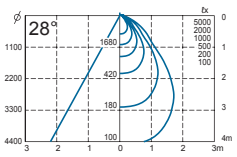
EW0526N/SA1/2.4 (For transmission)
EW0526N/SA1/2.4E (For unit installation)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
3,700ℓm	60W
Luminous efficacy	**LED module life**
61.7ℓm/W	40,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 5,000K (Daylight)	68

Specifications

Body: Diecast aluminum
Front panel: Tempered glass
Arm: Stainless
Bracket: Stainless
Cable: Cabtyre cable (2,000mm outside luminaire)
Protection rating: IP68
Weight: 6.0kg





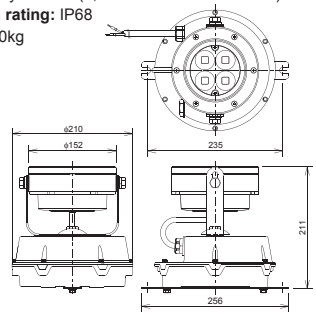
Underwater/outdoor

EW0526LW/SA1/2.4 (For transmission)
EW0526LW/SA1/2.4E (For unit installation)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
2,650ℓm	60W
Luminous efficacy	**LED module life**
44.2ℓm/W	40,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 3,000K (Warm white)	80

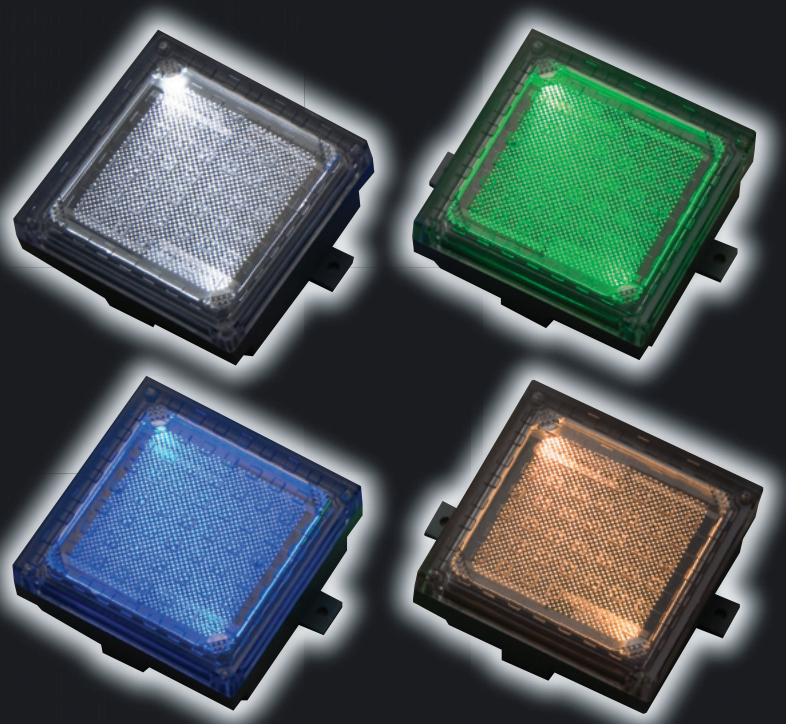
Specifications

Body: Diecast aluminum
Front panel: Tempered glass
Arm: Stainless
Bracket: Stainless
Cable: Cabtyre cable (2,000mm outside luminaire)
Protection rating: IP68
Weight: 6.0kg

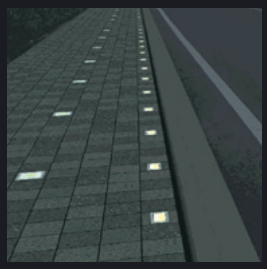


* The horizontal plane illumination distribution diagram above indicates initial values (unit: ℓx).
* The luminaires can also be provided in blue, green and red light color models.

Solar LED Block and Tile Series



Stores light in the daytime.



Emits light at night.

As a solar powered LED system, it does not need a power supply and there are no running costs! It can be used as an evacuating light in the event of emergencies.

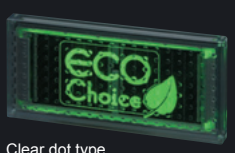
Description of four features

- **Long life makes it virtually maintenance free**
  Unlike conventional devices, the electrical double layer capacitor provides at least 100,000 charge/discharge cycles eliminating the need for battery replacements. As the light-emitting element is an LED, there is no need for bulb replacements or other time-consuming maintenance work.
- **All-weather (depending on installation conditions)**
  Use of highly efficient circuits and an amorphous solar cell make it possible to charge the electrical double layer capacitor even during days of little sunlight (in cloudy or rainy weather).
- **Environmentally friendly**
  The LED uses natural solar energy and the battery contains no hazardous heavy metals (lead or cadmium) and will therefore not impact the environment.
- **High durability design**
  Durability design makes it highly impervious to impact. Thanks to a hermetically sealed construction, it is not affected by wind or rain. The polycarbonate resin used in the top case prevents discoloration of the resin from ultraviolet rays.

Solar LED series safety mechanism ▶ In humid conditions, the Solar LED has a skid resistance equal to or exceeding the BPN 40 skid resistance requirement set by the Tokyo Welfare Urban Planning Regulations. The 1-mm tape around the edges increases safety by reducing any height differences between the Solar LED and the ground. (Not available for the clear dot type Solar LED)

The product can be manufactured to custom designs.

The Solar LED can be customized to display a wide variety of designs such as symbols, company names, logos or directions. Please feel free to consult us for more information.

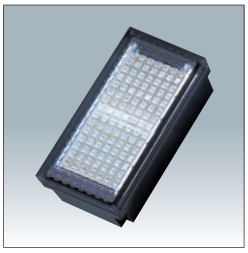


Clear dot type

SLBRN type

SLB100 type

SLB8L type



Surface-emitting LED | White type

Weather-proof

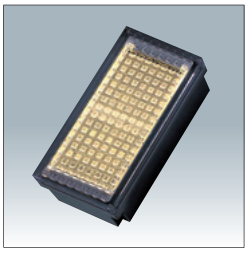
8-hour surface-emitting LED

SLBRN/W

14-hour surface-emitting LED, long-hour type

SLBRN/W-14

LED module life 40,000hours



Surface-emitting LED

Warm white

Weather-proof

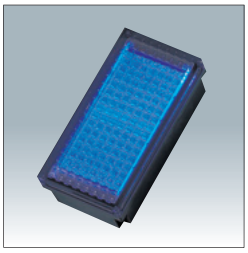
8-hour surface-emitting LED

SLBRN/L

14-hour surface-emitting LED, long-hour type

SLBRN/L-14

LED module life 40,000hours



Surface-emitting LED | Blue type

Weather-proof

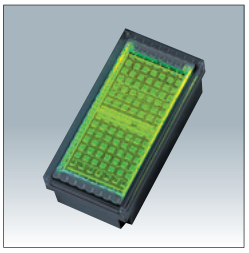
8-hour surface-emitting LED

SLBRN/B

14-hour surface-emitting LED, long-hour type

SLBRN/B-14

LED module life 40,000hours



Surface-emitting LED | Green type

Weather-proof

8-hour surface-emitting LED

SLBRN/G

14-hour surface-emitting LED, long-hour type

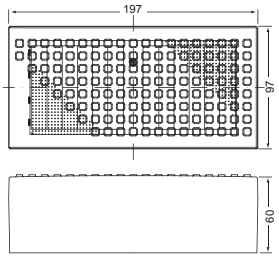
SLBRN/G-14

LED module life 40,000hours

Shared specifications

Body: Polycarbonate resin (top and bottom case)
Solar cell: Amorphous silicon
Battery: Electrical double layer capacitor
Operating time
(when fully charged): 8hours (surface-emitting LED)
14hours (surface-emitting LED, long-hour type)
Charging time
(to fully charge): 6hours (20,000ℓx in cloudy weather)
On/off: Goes on automatically at dusk and turns off automatically at sunup
Skid resistance (when wet): 40BPN or more
Weight: 0.94kg
* Clear dot type that permit custom designs

<Installation precautions>
- The Solar LED should be installed in a location where it receives at least 6hours of sunlight per day.
- Avoid locations that will be snow covered in wintertime.
- Do not install it in locations where vehicles will drive over it.
- Do not install it in low spots where water may collect.
- Since the Solar LED relies on a solar cell for power, weather, location of installation and other conditions may affect brightness, lighting times and can even prevent the LED from lighting.
- The Solar LED may not light at night if installed in a location exposed to excessively bright lights after dark.
- The Solar LED should be regularly cleaned as soiling on the solar cell surface may cause the power generating efficiency to drop or even impact the life of the product.



High luminance type | White type

Weather-proof

8-hour surface-emitting, high luminance LED

SLB8L/W

LED module life 40,000hours

High luminance type

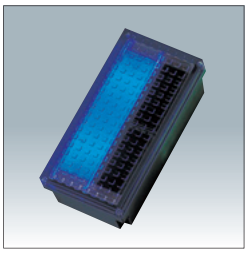
Warm white

Weather-proof

8-hour surface-emitting, high luminance LED

SLB8L/L

LED module life 40,000hours



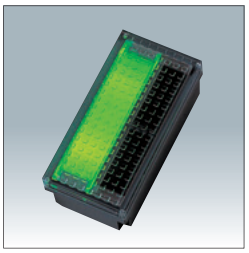
High luminance type | Blue type

Weather-proof

8-hour surface-emitting, high luminance LED

SLB8L/B

LED module life 40,000hours



High luminance type | Green type

Weather-proof

8-hour surface-emitting, high luminance LED

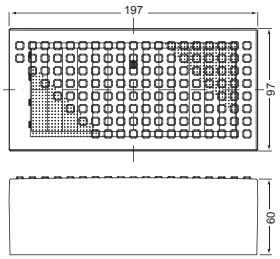
SLB8L/G

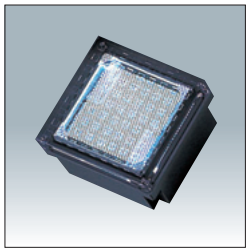
LED module life 40,000hours

Shared specifications

Body: Polycarbonate resin (top and bottom case)
Solar cell: Single-crystal silicon
Battery: Electrical double layer capacitor
Operating time (when fully charged): 8hours
Charging time
(to fully charge): 6hours (20,000ℓx in cloudy weather)
On/off: Goes on automatically at dusk and turns off automatically at sunup
Skid resistance (when wet): 40BPN or more
Weight: 0.92kg

<Installation precautions>
- The Solar LED should be installed in a location where it receives at least 6hours of sunlight per day.
- Avoid locations that will be snow covered in wintertime.
- Do not install it in locations where vehicles will drive over it.
- Do not install it in low spots where water may collect.
- Since the Solar LED relies on a solar cell for power, weather, location of installation and other conditions may affect brightness, lighting times and can even prevent the LED from lighting.
- The Solar LED may not light at night if installed in a location exposed to excessively bright lights after dark.
- The Solar LED should be regularly cleaned as soiling on the solar cell surface may cause the power generating efficiency to drop or even impact the life of the product.





Surface-emitting LED | White type

Weather-proof

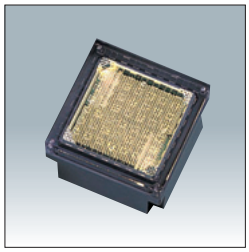
8-hour, square surface-emitting LED

SLB100/W

15-hour, square surface-emitting, flashing LED

SLB100/W-H

LED module life 40,000hours



Surface-emitting LED | Warm white

Weather-proof

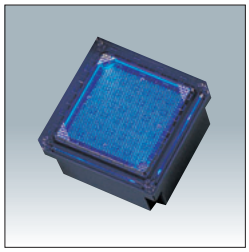
8-hour, square surface-emitting LED

SLB100/L

15-hour, square surface-emitting, flashing LED

SLB100/L-H

LED module life 40,000hours



Surface-emitting LED | Blue type

Weather-proof

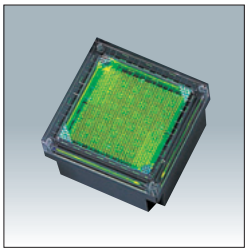
8-hour, square surface-emitting LED

SLB100/B

15-hour, square surface-emitting, flashing LED

SLB100/B-H

LED module life 40,000hours



Surface-emitting LED | Green type

Weather-proof

8-hour, square surface-emitting LED

SLB100/G

15-hour, square surface-emitting, flashing LED

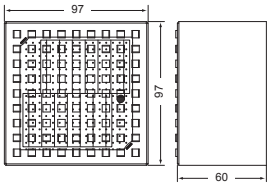
SLB100/G-H

LED module life 40,000hours

Shared specifications

Body: Polycarbonate resin (top case) PC/ABS resin (bottom case)
Solar cell: Amorphous silicon
Battery: Electrical double layer capacitor
Operating time
(when fully charged): 8hours (square surface-emitting LED)
15hours (square surface-emitting, flashing LED)
Charging time
(to fully charge): 6hours (20,000ℓx in cloudy weather)
On/off: Goes on automatically at dusk and turns off automatically at sunup
Skid resistance (when wet): 40BPN or more
Weight: 0.49kg
* Clear dot type that permit custom designs

<Installation precautions>
- The Solar LED should be installed in a location where it receives at least 6hours of sunlight per day.
- Avoid locations that will be snow covered in wintertime.
- Do not install it in locations where vehicles will drive over it.
- Do not install them in low spots where water may collect.
- Since the Solar LED relies on a solar cell for power, weather, location of installation and other conditions may affect brightness, lighting times and can even prevent the LED from lighting.
- The Solar LED may not light at night if installed in a location exposed to excessively bright lights after dark.
- The Solar LED should be regularly cleaned as soiling on the solar cell surface may cause the power generating efficiency to drop or even impact the life of the product.



Surface-emitting LED | White type

Weather-proof

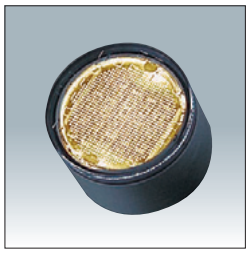
8-hour, round surface-emitting LED

SLB85/W

15-hour, round surface-emitting, flashing LED

SLB85/W-H

LED module life 40,000hours



Surface-emitting LED | Warm white

Weather-proof

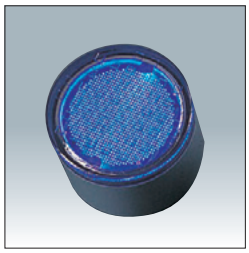
8-hour, round surface-emitting LED

SLB85/L

15-hour, round surface-emitting, flashing LED

SLB85/L-H

LED module life 40,000hours



Surface-emitting LED | Blue type

Weather-proof

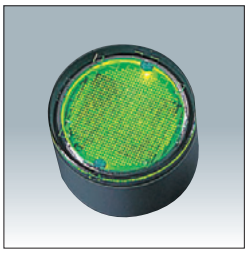
8-hour, round surface-emitting LED

SLB85/B

15-hour, round surface-emitting, flashing LED

SLB85/B-H

LED module life 40,000hours



Surface-emitting LED | Green type

Weather-proof

8-hour, round surface-emitting LED

SLB85/G

15-hour, round surface-emitting, flashing LED

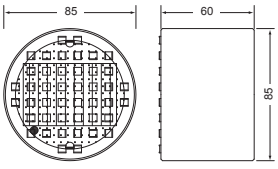
SLB85/G-H

LED module life 40,000hours

Shared specifications

Body: Polycarbonate resin (top case) PC/ABS resin (bottom case)
Solar cell: Amorphous silicon
Battery: Electrical double layer capacitor
Operating time
(when fully charged): 8hours (round surface-emitting LED)
15hour (round surface-emitting, flashing LED)
Charging time
(to fully charge): 10hours (20,000ℓx in cloudy weather)
On/off: Goes on automatically at dusk and turns off automatically at sunup
Skid resistance (when wet): 40BPN or more
Weight: 0.3kg

<Installation precautions>
- The Solar LED should be installed in a location where it receives at least 6hours of sunlight per day.
- Avoid locations that will be snow covered in wintertime.
- Do not install it in locations where vehicles will drive over it.
- Do not install it in low spots where water may collect.
- Since the Solar LED relies on a solar cell for power, weather, location of installation and other conditions may affect brightness, lighting times and can even prevent the LED from lighting.
- The Solar LED may not light at night if installed in a location exposed to excessively bright lights after dark.
- The Solar LED should be regularly cleaned as soiling on the solar cell surface may cause the power generating efficiency to drop or even impact the life of the product.



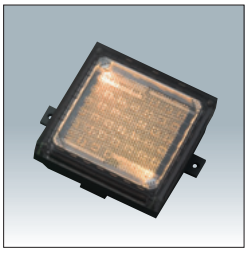
Solar LED Tile

Surface-emitting LED | White type | Low profile | Weather-proof

8-hour, square surface-emitting LED

SLT35/W

LED module life 40,000hours



Surface-emitting LED | Warm white | Low profile | Weather-proof

8-hour, square surface-emitting LED

SLT35/D

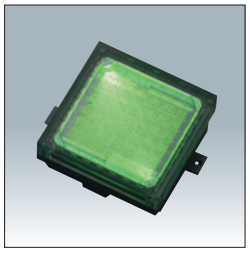
LED module life 40,000hours

Surface-emitting LED | Blue type | Low profile | Weather-proof

8-hour, square surface-emitting LED

SLT35/B

LED module life 40,000hours



Surface-emitting LED | Green type | Low profile | Weather-proof

8-hour, square surface-emitting LED

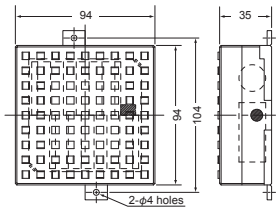
SLT35/G

LED module life 40,000hours

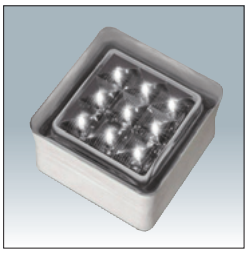
Shared specifications

Body: Polycarbonate resin (top case) PC/ABS resin (bottom case)
Solar cell: Amorphous silicon
Battery: Electrical double layer capacitor
Operating time (when fully charged): 8hours
Charging time (to fully charge): 6hours (20,000ℓx in cloudy weather)
On/off: Goes on automatically at dusk and turns off automatically at sunup
Skid resistance (when wet): 40BPN or more
Weight: 0.29kg

<Installation precautions>
- The Solar LED should be installed in a location where it receives at least 6 hours of sunlight per day.
- Avoid locations that will be snow covered in wintertime.
- Do not install it in locations where vehicles will drive over it.
- Do not install it in low spots where water may collect.
- Since the Solar LED relies on a solar cell for power, weather, location of installation and other conditions may affect brightness, lighting times and can even prevent the LED from lighting.
- The Solar LED may not light at night if installed in a location exposed to excessively bright lights after dark.
- The Solar LED should be regularly cleaned as soiling on the solar cell surface may cause the power generating efficiency to drop or even impact the life of the product.



Solar LED Glass Block

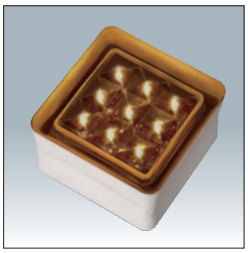


Surface-emitting LED | White type | Weather-proof

8-hour, surface-emitting LED

SLB120G/W

LED module life 40,000hours



Surface-emitting LED | Warm white | Weather-proof

8-hour, surface-emitting LED

SLB120G/L

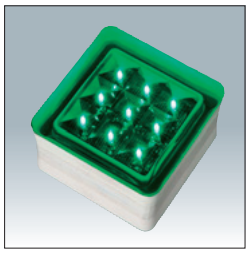
LED module life 40,000hours

Surface-emitting LED | Blue type | Weather-proof

8-hour, surface-emitting LED

SLB120G/B

LED module life 40,000hours



Surface-emitting LED | Green type | Weather-proof

8-hour, surface-emitting LED

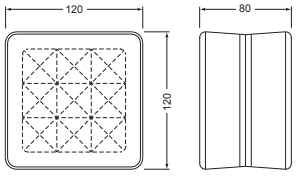
SLB120G/G

LED module life 40,000hours

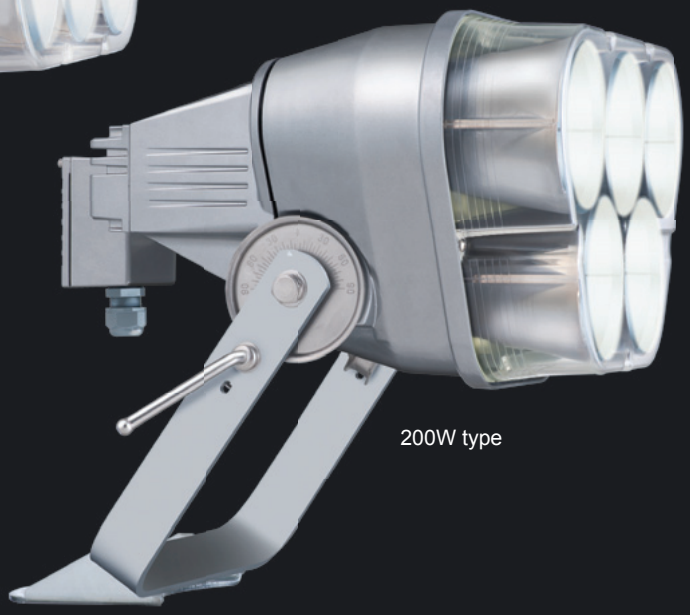
Shared specifications

Body: Hard glass
Solar cell: Single-crystal silicon
Battery: Electrical double layer capacitor
Operating time (when fully charged): 8hours
Charging time (to fully charge): 6hours (20,000ℓx in cloudy weather)
On/off: Goes on automatically at dusk and turns off automatically at sunup
Weight: 1.7kg

<Installation precautions>
- The Solar LED should be installed in a location where it receives at least 6hours of sunlight per day.
- Avoid locations that will be snow covered in wintertime.
- Do not install it in locations where vehicles will drive over it.
- Do not install in low spots where water may collect.
  Also, do not subject to impact from hard or heavy objects. Doing so may damage the device and/or cause physical injury from broken glass.
- Since the Solar LED relies on a solar cell for power, weather, location of installation and other conditions may affect brightness, lighting times and can even prevent the LED from lighting.
- The Solar LED may not light at night if installed in a location exposed to excessively bright lights after dark.
- The Solar LED should be regularly cleaned as soiling on the solar cell surface may cause the power generating efficiency to drop or even impact the life of the product.



400W type



200W type

LEDioc FLOOD BLITZ

Substantial energy savings

Lower electricity consumption and CO_2 emissions than HID floodlights.

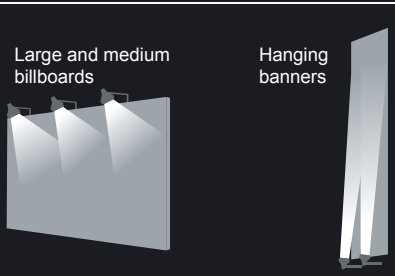
- 400W type.... About a 61% energy saving when compared to a 1kW HID floodlight
- 200W type.... About a 51% energy saving when compared to a 400W HID floodlight

Long life means less maintenance

- LED module life of up to 40,000hours. Long life means less lamp replacement work.

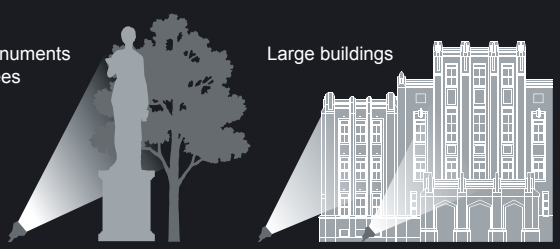
Major usage examples

Signboard lighting



Area light

Landscape lighting

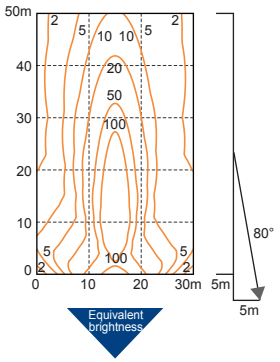


Suppresses unnecessary light to achieve substantial energy savings and reductions in CO_2 emissions

The high directional characteristics of LEDs have been combined with high-performance reflective mirrors to suppress unnecessary light outside the illumination area to minimize energy waste and achieve substantial energy savings and reductions in CO_2 emissions.

Comparison example

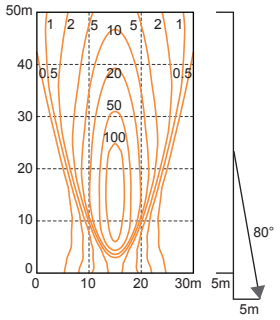
HID floodlight (H566SX)
1,000W metal halide lamp (M1000LS/BD)



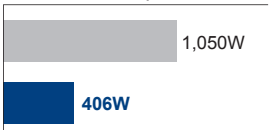
HID floodlight
(H566SX)
1,000W metal halide lamp
(M1000LS/BD)

LEDioc FLOOD BLITZ 400W type
(E4021N/SA1/2.4)

LEDioc FLOOD BLITZ 400W type (Narrow beam)



Power consumption*1

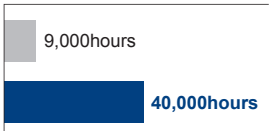


An energy saving of roughly **61%**

Annual amount of CO_2 emissions*2

About a **1,108kg** reduction in CO_2

Lifetime

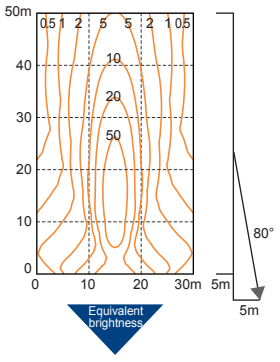


About **4.4** times

*1 Power consumption for 200V metal halide lamp (standard HPF ballast) and LED lamp operating at 200V.
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

Comparison example

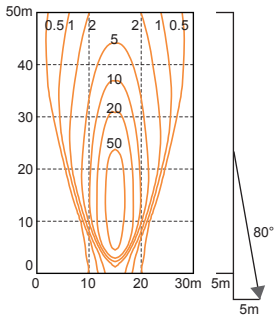
HID floodlight (H366SX)
400W metal halide lamp (M400LSH/U)



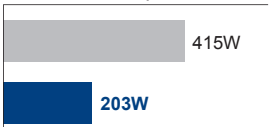
HID floodlight
(H366SX)
400W metal halide lamp
(M400LSH/U)

LEDioc FLOOD BLITZ 200W type
(E2021N/SA1/2.4)

LEDioc FLOOD BLITZ 200W type (Narrow beam)



Power consumption*1

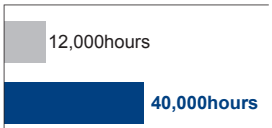


An energy saving of roughly **51%**

Annual amount of CO_2 emissions*2

About a **365kg** reduction in CO_2

Lifetime



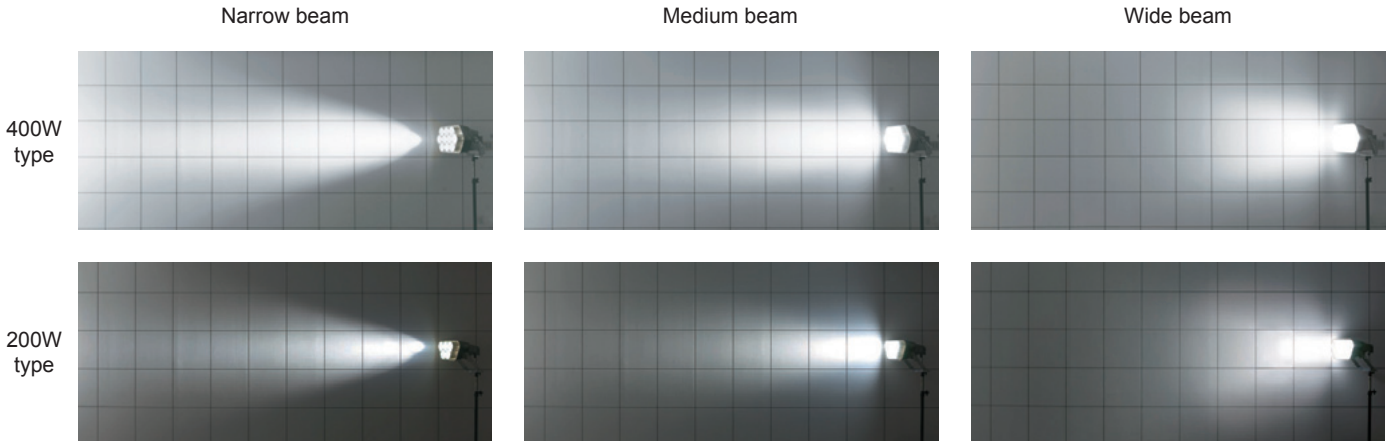
About **3.3** times

*1 Power consumption for 200V metal halide lamp (standard HPF ballast) and LED lamp operating at 200V.
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

* Above illuminance diagram indicates initial values (unit: ℓx).

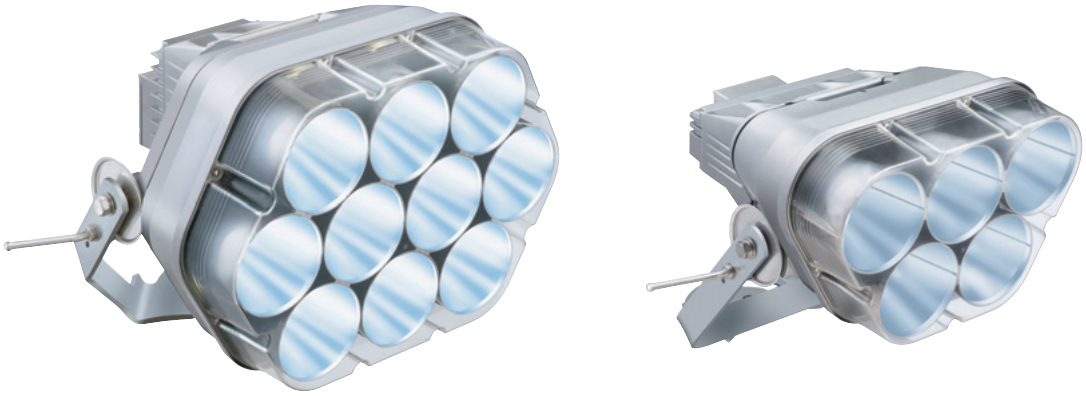
Extensive and varied lineup

Two different levels of brightness - 400W and 200W - and narrow, medium and wide light distribution make it easy to find a floodlight that provides efficient lighting for any application.



Natural beam distribution

Reflectors control light distribution to ensure natural distribution of light.



400W type

200W type

Instant start

LEDs go on instantly, there is no warm up period. The ease they can be turned on and off makes them ideal for landscape lighting.

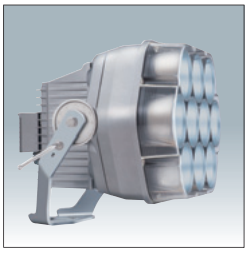
A long rated life of 40,000hours

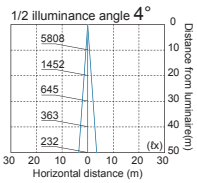
The rated life of an LED is 40,000hours. This considerably reduces the need for maintenance making them the ideal floodlights for use in locations where maintenance is a challenge.

Environmentally friendly (low insect attraction and mercury free)

LEDs reduce light output at wavelengths that attract insects. The light they produce is beneficial for the surrounding ecosystem by deterring insects. Completely free of mercury makes them environmentally friendly.

400W type





Narrow beam

Weather-proof

E4021N/SA1/2.4

(100 to 240V, 50/60Hz)

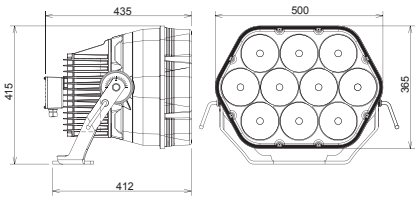
Rated luminous flux (luminaire luminous flux)	Power consumption
28,900ℓm	424W (100V) 406W (200V) 402W (240V)

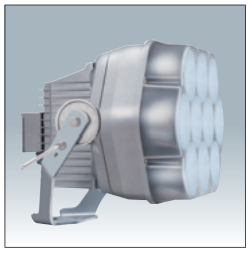
Luminous efficacy
68.2ℓm/W (100V) 71.2ℓm/W (200V) 71.9ℓm/W (240V)

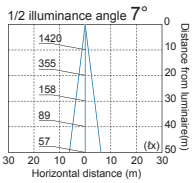
LED module life	Light color	Color rendering index (Ra)
40,000hours	Equivalent to 5,000K (Daylight)	68

Specifications

Body: Diecast aluminum
Reflector: Diecast aluminum
Front cover: Acrylic (clear)
Arm with stand: Steel plate (hot dip galvanizing)
Finish color: Metallic gray
1/10 beam angle: 23°
Installation angle: Any position (no limitation)
Weight: 28kg







Medium beam

Weather-proof

E4022N/SA1/2.4

(100 to 240V, 50/60Hz)

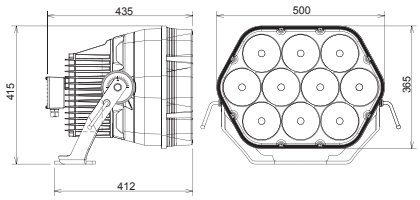
Rated luminous flux (luminaire luminous flux)	Power consumption
25,700ℓm	424W (100V) 406W (200V) 402W (240V)

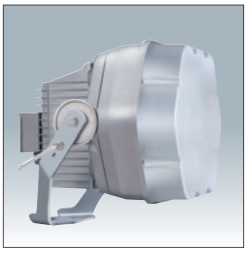
Luminous efficacy
60.6ℓm/W (100V) 63.3ℓm/W (200V) 63.9ℓm/W (240V)

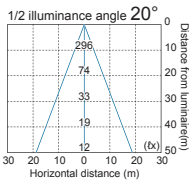
LED module life	Light color	Color rendering index (Ra)
40,000hours	Equivalent to 5,000K (Daylight)	68

Specifications

Body: Diecast aluminum
Reflector: Diecast aluminum
Front cover: Acrylic (frosted)
Arm with stand: Steel plate (hot dip galvanizing)
Finish color: Metallic gray
1/10 beam angle: 39°
Installation angle: Any position (no limitation)
Weight: 28kg







Wide beam

Weather-proof

E4023N/SA1/2.4

(100 to 240V, 50/60Hz)

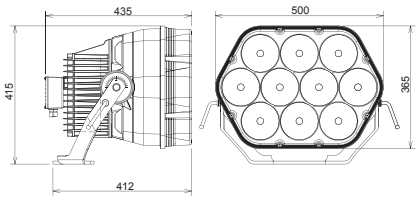
Rated luminous flux (luminaire luminous flux)	Power consumption
26,000ℓm	424W (100V) 406W (200V) 402W (240V)

Luminous efficacy
61.3ℓm/W (100V) 64.0ℓm/W (200V) 64.7ℓm/W (240V)

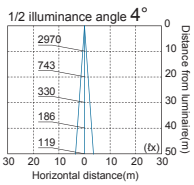
LED module life	Light color	Color rendering index (Ra)
40,000hours	Equivalent to 5,000K (Daylight)	68

Specifications

Body: Diecast aluminum
Reflector: Diecast aluminum
Front cover: Acrylic (frosted)
Arm with stand: Steel plate (hot dip galvanizing)
Finish color: Metallic gray
1/10 beam angle: 89°
Installation angle: Any position (no limitation)
Weight: 28kg



200W type



Narrow beam

Weather-proof

E2021N/SA1/2.4

(100 to 240V, 50/60Hz)

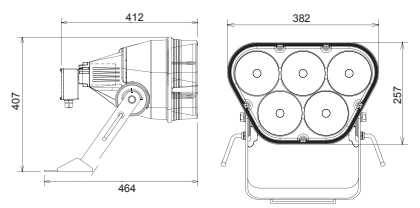
Rated luminous flux (luminaire luminous flux)	Power consumption
14,300ℓm	212W (100V) 203W (200V) 201W (240V)

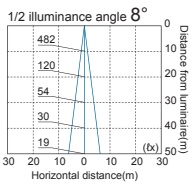
Luminous efficacy
67.5ℓm/W (100V) 70.4ℓm/W (200V) 71.1ℓm/W (240V)

LED module life	Light color	Color rendering index (Ra)
40,000hours	Equivalent to 5,000K (Daylight)	68

Specifications

Body: Diecast aluminum
Reflector: Diecast aluminum
Front cover: Acrylic (clear)
Arm with stand: Steel plate (hot dip galvanizing)
Finish color: Metallic gray
1/10 beam angle: 23°
Installation angle: Any position (no limitation)
Weight: 16kg





Medium beam

Weather-proof

E2022N/SA1/2.4

(100 to 240V, 50/60Hz)

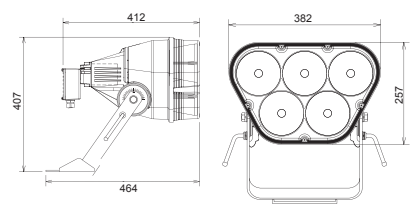
Rated luminous flux (luminaire luminous flux)	Power consumption
12,500ℓm	212W (100V) 203W (200V) 201W (240V)

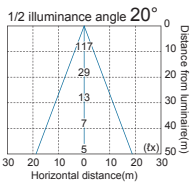
Luminous efficacy
59.0ℓm/W (100V) 61.6ℓm/W (200V) 62.2ℓm/W (240V)

LED module life	Light color	Color rendering index (Ra)
40,000hours	Equivalent to 5,000K (Daylight)	68

Specifications

Body: Diecast aluminum
Reflector: Diecast aluminum
Front cover: Acrylic (frosted)
Arm with stand: Steel plate (hot dip galvanizing)
Finish color: Metallic gray
1/10 beam angle: 46°
Installation angle: Any position (no limitation)
Weight: 16kg





Wide beam

Weather-proof

E2023N/SA1/2.4

(100 to 240V, 50/60Hz)

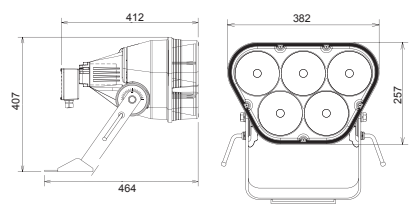
Rated luminous flux (luminaire luminous flux)	Power consumption
11,900ℓm	212W (100V) 203W (200V) 201W (240V)

Luminous efficacy
56.1ℓm/W (100V) 58.6ℓm/W (200V) 59.2ℓm/W (240V)

LED module life	Light color	Color rendering index (Ra)
40,000hours	Equivalent to 5,000K (Daylight)	68

Specifications

Body: Diecast aluminum
Reflector: Diecast aluminum
Front cover: Acrylic (frosted)
Arm with stand: Steel plate (hot dip galvanizing)
Finish color: Metallic gray
1/10 beam angle: 105°
Installation angle: Any position (no limitation)
Weight: 16kg



* Above illuminance indicates initial values (unit: ℓx).

LEDioc FLOOD NEO

- A compact floodlight with the industry's highest level of brightness.
- 3-type lineup including narrow, medium and wide beam types.
- An any position operation mechanism enables installation in virtually any direction and at any angle.
- A specially built-in power supply unit enables operation using 100 to 240V AC, 50/60Hz common.

95W

As bright as a 500W self ballast mercury lamp while saving about 82% of energy.

50W

As bright or brighter than a 250W halogen lamp while saving 80% of energy.

35W

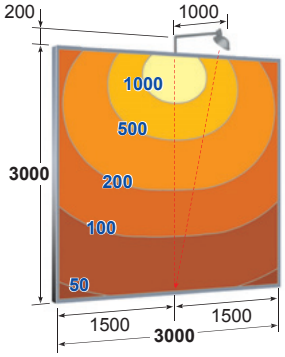
As bright or brighter than a 250W halogen lamp while saving 86% of energy.

95W

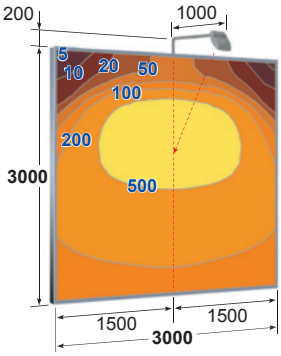
Comparison example

Self ballast mercury lamp holder
(S0/W-L14)
500W self ballast mercury lamp
(BHRF200/220V500WH)

LEDioc FLOOD NEO 95W
(Wide beam type, Daylight type
ECF0773N/SAI/2.4/DG)



Initial average illuminance 299ℓx

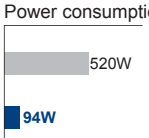


Initial average illuminance 314ℓx

Self ballast mercury lamp holder
(S0/W-L14)
500W self ballast mercury lamp
(BHRF200/220V500WH)

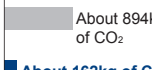
LEDioc FLOOD NEO 95W
Wide beam type,
Daylight type
(ECF0773N/SAI/2.4/DG)

Power consumption*1



An energy saving of roughly 82%

Annual amount of CO_2 emissions*2



About a 732kg reduction in CO_2

Lifetime

About 4.4 times

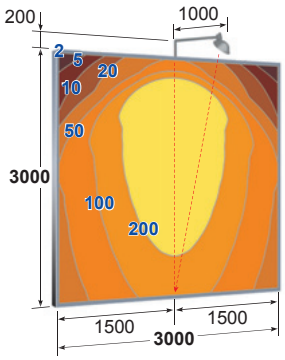
*1 Power consumption for a self ballast mercury lamp: Input power during rated voltage input.
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

50W

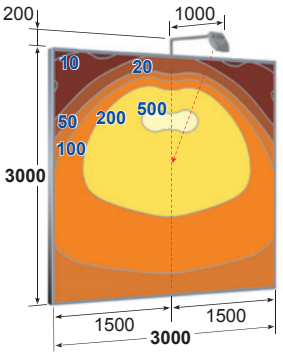
Comparison example

Floodlight for halogen lamp
(JAW0/BK-L14)
250W halogen lamp (JD110V250W/P/M)

LEDioc FLOOD NEO 50W
(Wide beam type, Daylight type
ECF0476N/SAI/2.4/DG)



Initial average illuminance 152ℓx

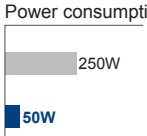


Initial average illuminance 174ℓx

Floodlight for halogen lamp
(JAW0/BK-L14)
250W halogen lamp
(JD110V250W/P/M)

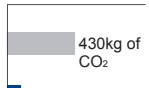
LEDioc FLOOD NEO 50W
Wide beam type,
Daylight type
(ECF0476N/SAI/2.4/DG)

Power consumption*1



80% energy saving

Annual amount of CO_2 emissions*2



344kg reduction in CO_2

Lifetime

20 times

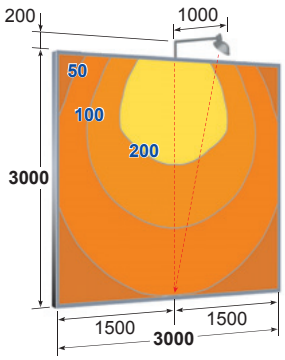
*1 Power consumption of a halogen lamp: Input power at rated voltage input.
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

35W

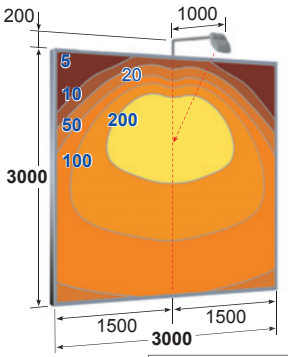
Comparison example

Floodlight for halogen lamp
(JB0/BK-L13)
250W halogen lamp (JD110V250W/P/M)

LEDioc FLOOD NEO 35W
(Wide beam type, Daylight type
ECF0376N/SAI/2.4/DG)



Initial average illuminance 107ℓx

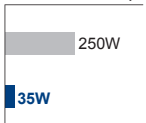


Initial average illuminance 116ℓx

Floodlight for halogen lamp
(JB0/BK-L13)
250W halogen lamp
(JD110V250W/P/M)

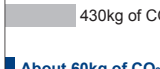
LEDioc FLOOD NEO 35W
Wide beam type,
Daylight type
(ECF0376N/SAI/2.4/DG)

Power consumption*1



86% energy saving

Annual amount of CO_2 emissions*2



About a 370kg reduction in CO_2

Lifetime

20 times

*1 Power consumption of a halogen lamp: Input power at rated voltage input.
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

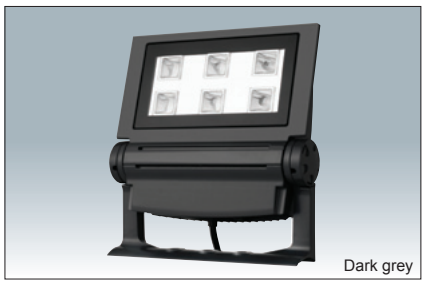
Narrow beam


Daylight


Warm white

Weather-proof

ECF0771N/SA1/2.4/W (Daylight)
ECF0771LW/SA1/2.4/W (Warm white)
(100 to 240V, 50/60Hz)




Daylight


Warm white

Weather-proof

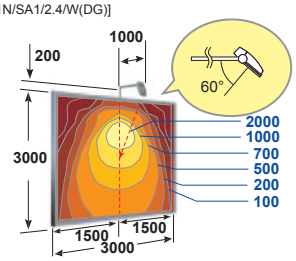
ECF0771N/SA1/2.4/DG (Daylight)
ECF0771LW/SA1/2.4/DG (Warm white)
(100 to 240V, 50/60Hz)

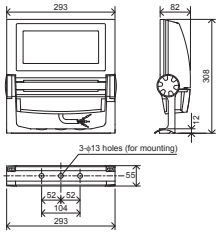
Rated luminous flux (luminaire luminous flux)	Power consumption
5,720ℓm (Daylight), 4,070ℓm (Warm white)	94W
Luminous efficacy	**LED module life**
60.9ℓm/W (Daylight), 43.3ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum (polyester paint)
Front cover: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Installation angle: Any position (no limitation)
Weight: 5.5kg

[ECF0771N/SA1/2.4/W(DG)]





Medium beam


Daylight


Warm white

Weather-proof

ECF0772N/SA1/2.4/W (Daylight)
ECF0772LW/SA1/2.4/W (Warm white)
(100 to 240V, 50/60Hz)


Daylight


Warm white

Weather-proof

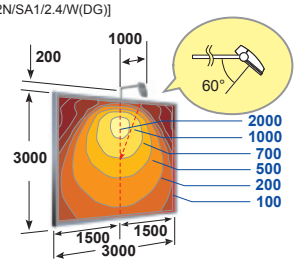
ECF0772N/SA1/2.4/DG (Daylight)
ECF0772LW/SA1/2.4/DG (Warm white)
(100 to 240V, 50/60Hz)

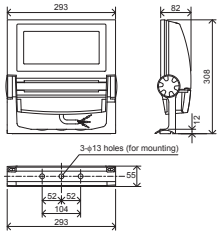
Rated luminous flux (luminaire luminous flux)	Power consumption
5,920ℓm (Daylight), 4,210ℓm (Warm white)	94W
Luminous efficacy	**LED module life**
63.0ℓm/W (Daylight), 44.8ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum (polyester paint)
Front cover: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Installation angle: Any position (no limitation)
Weight: 5.5kg

[ECF0772N/SA1/2.4/W(DG)]





Wide beam


Daylight


Warm white

Weather-proof

ECF0773N/SA1/2.4/W (Daylight)
ECF0773LW/SA1/2.4/W (Warm white)
(100 to 240V, 50/60Hz)


Daylight


Warm white

Weather-proof

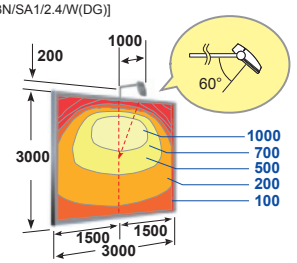
ECF0773N/SA1/2.4/DG (Daylight)
ECF0773LW/SA1/2.4/DG (Warm white)
(100 to 240V, 50/60Hz)

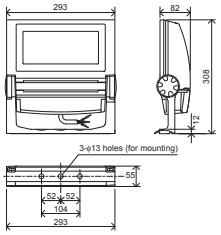
Rated luminous flux (luminaire luminous flux)	Power consumption
6,290ℓm (Daylight), 4,470ℓm (Warm white)	94W
Luminous efficacy	**LED module life**
66.9ℓm/W (Daylight), 47.6ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum (polyester paint)
Front cover: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Installation angle: Any position (no limitation)
Weight: 5.5kg

[ECF0773N/SA1/2.4/W(DG)]





* Above illuminance diagram indicates initial values (unit: ℓx).

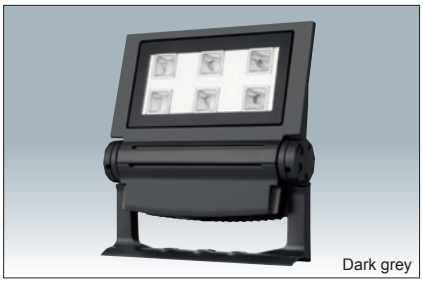
Narrow beam


Daylight


Warm white

Dimmable type **Weather-proof**

ECF0771DN/SA1/2.4/W (Daylight)
ECF0771DLW/SA1/2.4/W (Warm white)
(100 to 240V, 50/60Hz)




Daylight


Warm white

Dimmable type **Weather-proof**

ECF0771DN/SA1/2.4/DG (Daylight)
ECF0771DLW/SA1/2.4/DG (Warm white)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
5,720ℓm (Daylight), 4,070ℓm (Warm white)	94W
Luminous efficacy	**LED module life**
60.9ℓm/W (Daylight), 43.3ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

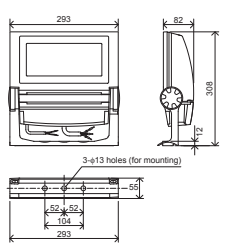
Specifications

Body: Diecast aluminum (polyester paint)
Front cover: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Dimming cable: Heat-resisting vinyl sheath cable (1,500mm outside luminaire)
Installation angle: Any position (no limitation)
Weight: 5.5kg

Dimming system: PWM
Compatible dimmer:

Manual dimmer	I.DF-70162-PD
LED EYE sensor system	ILX-402 (outdoor motion sensor)
	ILC-1C (controller)
	ILC-2MC (wireless controller)

* Since a dimming ratio of 10% or more causes LEDs to flicker, set the dimming ratio to 10% or higher.



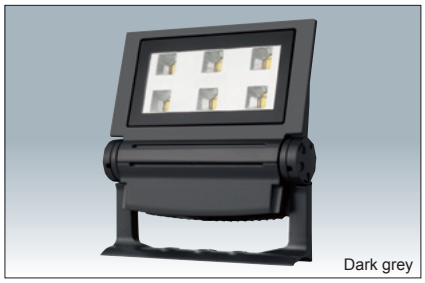
Medium beam


Daylight


Warm white

Dimmable type **Weather-proof**

ECF0772DN/SA1/2.4/W (Daylight)
ECF0772DLW/SA1/2.4/W (Warm white)
(100 to 240V, 50/60Hz)




Daylight


Warm white

Dimmable type **Weather-proof**

ECF0772DN/SA1/2.4/DG (Daylight)
ECF0772DLW/SA1/2.4/DG (Warm white)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
5,920ℓm (Daylight), 4,210ℓm (Warm white)	94W
Luminous efficacy	**LED module life**
63.0ℓm/W (Daylight), 44.8ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

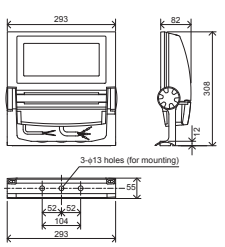
Specifications

Body: Diecast aluminum (polyester paint)
Front cover: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Dimming cable: Heat-resisting vinyl sheath cable (1,500mm outside luminaire)
Installation angle: Any position (no limitation)
Weight: 5.5kg

Dimming system: PWM
Compatible dimmer:

Manual dimmer	I.DF-70162-PD
LED EYE sensor system	ILX-402 (outdoor motion sensor)
	ILC-1C (controller)
	ILC-2MC (wireless controller)

* Since a dimming ratio of 10% or more causes LEDs to flicker, set the dimming ratio to 10% or higher.



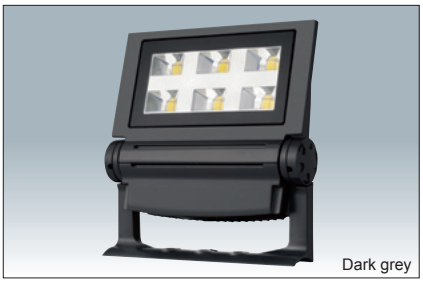
Wide beam


Daylight


Warm white

Dimmable type **Weather-proof**

ECF0773DN/SA1/2.4/W (Daylight)
ECF0773DLW/SA1/2.4/W (Warm white)
(100 to 240V, 50/60Hz)




Daylight


Warm white

Dimmable type **Weather-proof**

ECF0773DN/SA1/2.4/DG (Daylight)
ECF0773DLW/SA1/2.4/DG (Warm white)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
6,290ℓm (Daylight), 4,470ℓm (Warm white)	94W
Luminous efficacy	**LED module life**
66.9ℓm/W (Daylight), 47.6ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

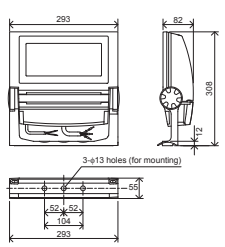
Specifications

Body: Diecast aluminum (polyester paint)
Front cover: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Dimming cable: Heat-resisting vinyl sheath cable (1,500mm outside luminaire)
Installation angle: Any position (no limitation)
Weight: 5.5kg

Dimming system: PWM
Compatible dimmer:

Manual dimmer	I.DF-70162-PD
LED EYE sensor system	ILX-402 (outdoor motion sensor)
	ILC-1C (controller)
	ILC-2MC (wireless controller)

* Since a dimming ratio of 10% or more causes LEDs to flicker, set the dimming ratio to 10% or higher.



Narrow beam


Daylight


Warm white

Weather-proof

ECF0474N/SA1/2.4/W (Daylight)
ECF0474LW/SA1/2.4/W (Warm white)
(100 to 240V, 50/60Hz)


Daylight


Warm white

Weather-proof

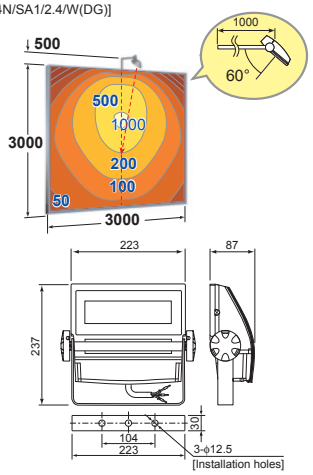
ECF0474N/SA1/2.4/DG (Daylight)
ECF0474LW/SA1/2.4/DG (Warm white)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
3,220ℓm (Daylight), 2,290ℓm (Warm white)	50W
Luminous efficacy	**LED module life**
64.6ℓm/W (Daylight), 45.8ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum (polyester paint)
Front cover: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Installation angle: Any position (no limitation)
Weight: 4.0kg

[ECF0474N/SA1/2.4/W(DG)]



Medium beam


Daylight


Warm white

Weather-proof

ECF0475N/SA1/2.4/W (Daylight)
ECF0475LW/SA1/2.4/W (Warm white)
(100 to 240V, 50/60Hz)


Daylight


Warm white

Weather-proof

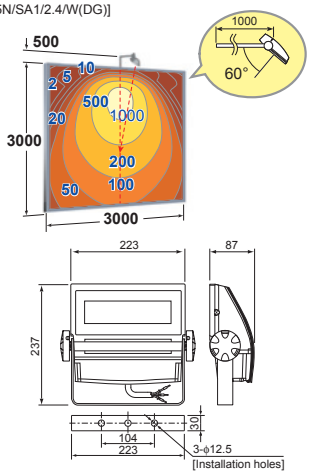
ECF0475N/SA1/2.4/DG (Daylight)
ECF0475LW/SA1/2.4/DG (Warm white)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
3,180ℓm (Daylight), 2,260ℓm (Warm white)	50W
Luminous efficacy	**LED module life**
63.6ℓm/W (Daylight), 45.2ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum (polyester paint)
Front cover: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Installation angle: Any position (no limitation)
Weight: 4.0kg

[ECF0475N/SA1/2.4/W(DG)]



Wide beam


Daylight


Warm white

Weather-proof

ECF0476N/SA1/2.4/W (Daylight)
ECF0476LW/SA1/2.4/W (Warm white)
(100 to 240V, 50/60Hz)


Daylight


Warm white

Weather-proof

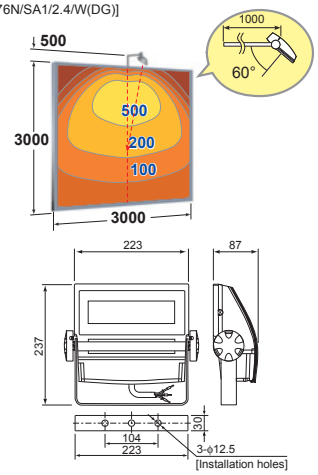
ECF0476N/SA1/2.4/DG (Daylight)
ECF0476LW/SA1/2.4/DG (Warm white)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
3,300ℓm (Daylight), 2,340ℓm (Warm white)	50W
Luminous efficacy	**LED module life**
66.0ℓm/W (Daylight), 46.8ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum (polyester paint)
Front cover: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Installation angle: Any position (no limitation)
Weight: 4.0kg

[ECF0476N/SA1/2.4/W(DG)]



* Above illuminance diagram indicates initial values (unit: ℓx).

Narrow beam


Daylight


Warm white

Weather-proof

ECF0374N/SA1/2.4/W (Daylight)
ECF0374LW/SA1/2.4/W (Warm white)
(100 to 240V, 50/60Hz)


Daylight


Warm white

Weather-proof

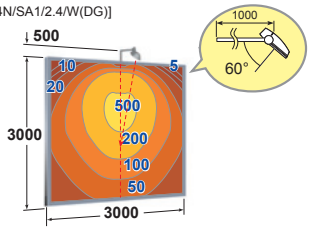
ECF0374N/SA1/2.4/DG (Daylight)
ECF0374LW/SA1/2.4/DG (Warm white)
(100 to 240V, 50/60Hz)

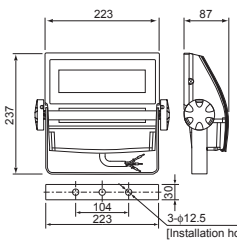
Rated luminous flux (luminaire luminous flux)	Power consumption
2,150ℓm (Daylight), 1,530ℓm (Warm white)	35W
Luminous efficacy	**LED module life**
61.4ℓm/W (Daylight), 43.7ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum (polyester paint)
Front cover: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Installation angle: Any position (no limitation)
Weight: 4.0 kg

[ECF0374N/SA1/2.4/W(DG)]





Medium beam


Daylight


Warm white

Weather-proof

ECF0375N/SA1/2.4/W (Daylight)
ECF0375LW/SA1/2.4/W (Warm white)
(100 to 240V, 50/60Hz)


Daylight


Warm white

Weather-proof

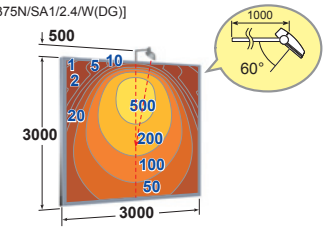
ECF0375N/SA1/2.4/DG (Daylight)
ECF0375LW/SA1/2.4/DG (Warm white)
(100 to 240V, 50/60Hz)

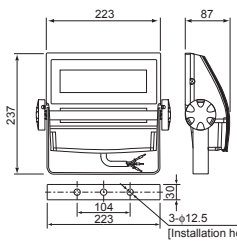
Rated luminous flux (luminaire luminous flux)	Power consumption
2,120ℓm (Daylight), 1,510ℓm (Warm white)	35W
Luminous efficacy	**LED module life**
60.6ℓm/W (Daylight), 43.1ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum (polyester paint)
Front cover: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Installation angle: Any position (no limitation)
Weight: 4.0 kg

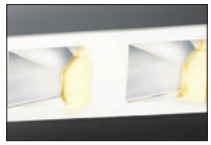
[ECF0375N/SA1/2.4/W(DG)]





Wide beam


Daylight


Warm white

Weather-proof

ECF0376N/SA1/2.4/W (Daylight)
ECF0376LW/SA1/2.4/W (Warm white)
(100 to 240V, 50/60Hz)


Daylight


Warm white

Weather-proof

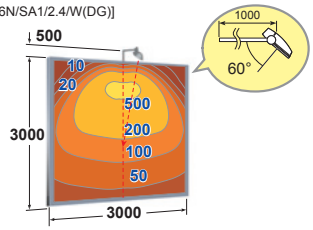
ECF0376N/SA1/2.4/DG (Daylight)
ECF0376LW/SA1/2.4/DG (Warm white)
(100 to 240V, 50/60Hz)

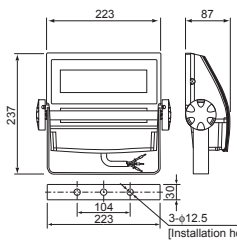
Rated luminous flux (luminaire luminous flux)	Power consumption
2,200ℓm (Daylight), 1,560ℓm (Warm white)	35W
Luminous efficacy	**LED module life**
62.9ℓm/W (Daylight), 44.6ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum (polyester paint)
Front cover: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Installation angle: Any position (no limitation)
Weight: 4.0 kg

[ECF0376N/SA1/2.4/W(DG)]





* Above illuminance diagram indicates initial values (unit: ℓx).

Since LEDioc FLOOD NEO 24V DC series can use power directly from a photovoltaic generation facility or other energy storage system, this product's solutions use precious green energy resources efficiently and are environmentally-friendly. Powered from a 24V DC battery, they can also be used to illuminate outdoor events or as emergency lighting during a disaster.

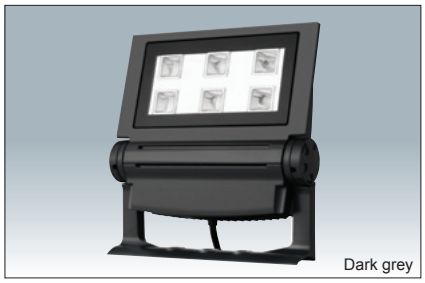
Narrow beam


Daylight


Warm white

Weather-proof

ECF0771N/SD2/W (Daylight)
ECF0771LW/SD2/W (Warm white)
(for 24V DC)




Daylight


Warm white

Weather-proof

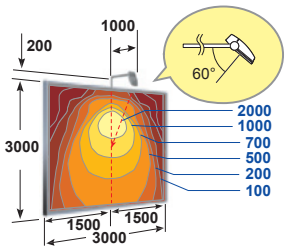
ECF0771N/SD2/DG (Daylight)
ECF0771LW/SD2/DG (Warm white)
(for 24V DC)

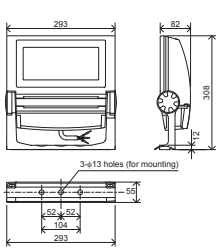
Rated luminous flux (luminaire luminous flux)	Power consumption
5,720ℓm (Daylight), 4,070ℓm (Warm white)	94W
Luminous efficacy	**LED module life**
60.9ℓm/W (Daylight), 43.3ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum (polyester paint)
Front cover: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Installation angle: Any position (no limitation)
Weight: 5.5kg

[ECF0771N/SD2/W(DG)]





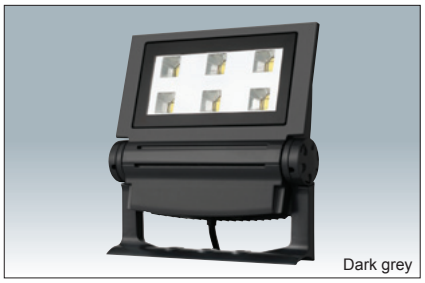
Medium beam


Daylight


Warm white

Weather-proof

ECF0772N/SD2/W (Daylight)
ECF0772LW/SD2/W (Warm white)
(for 24V DC)




Daylight


Warm white

Weather-proof

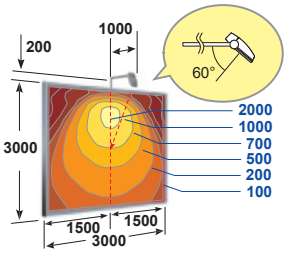
ECF0772N/SD2/DG (Daylight)
ECF0772LW/SD2/DG (Warm white)
(for 24V DC)

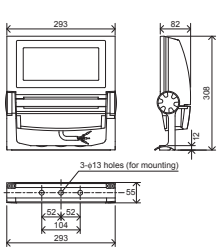
Rated luminous flux (luminaire luminous flux)	Power consumption
5,920ℓm (Daylight), 4,210ℓm (Warm white)	94W
Luminous efficacy	**LED module life**
63.0ℓm/W (Daylight), 44.8ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum (polyester paint)
Front cover: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Installation angle: Any position (no limitation)
Weight: 5.5kg

[ECF0772N/SD2/W]





Wide beam


Daylight


Warm white

Weather-proof

ECF0773N/SD2/W (Daylight)
ECF0773LW/SD2/W (Warm white)
(for 24V DC)


Daylight


Warm white

Weather-proof

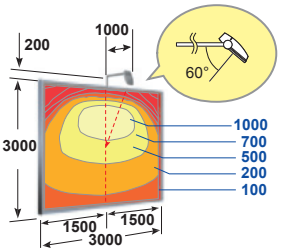
ECF0773N/SD2/DG (Daylight)
ECF0773LW/SD2/DG (Warm white)
(for 24V DC)

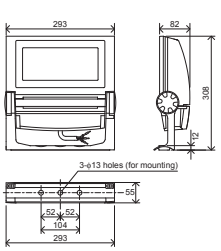
Rated luminous flux (luminaire luminous flux)	Power consumption
6,290ℓm (Daylight), 4,470ℓm (Warm white)	94W
Luminous efficacy	**LED module life**
66.9ℓm/W (Daylight), 47.6ℓm/W (Warm white)	40,000hours
Light color	
Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)	
Color rendering index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum (polyester paint)
Front cover: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Installation angle: Any position (no limitation)
Weight: 5.5kg

[ECF0773N/SD2/W]





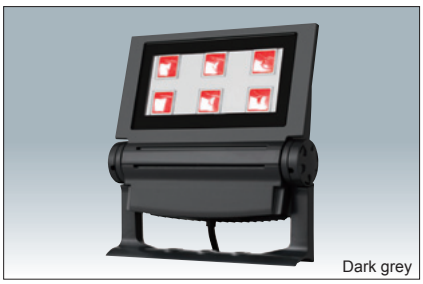
* Above illuminance diagram indicates initial values (unit: ℓx).

Narrow beam

Red type | Green type | Blue type

Weather-proof

ECF0771R/SA1/2.4/W (red type)
ECF0771G/SA1/2.4/W (green type)
ECF0771B/SA1/2.4/W (blue type)
(100 to 240V, 50/60Hz)



Red type | Green type | Blue type

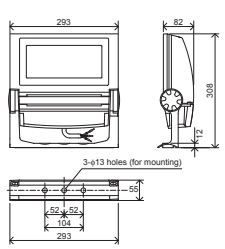
Weather-proof

ECF0771R/SA1/2.4/DG (red type)
ECF0771G/SA1/2.4/DG (green type)
ECF0771B/SA1/2.4/DG (blue type)
(100 to 240V, 50/60Hz)

Power consumption	LED module life
60W (red) 105W (green, blue)	40,000hours

Specifications

Body: Diecast aluminum (polyester paint)
Front cover: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Installation angle: Any position (no limitation)
Weight: 5.5kg

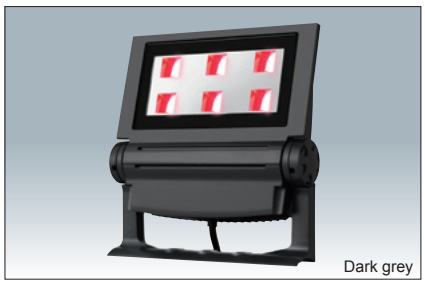


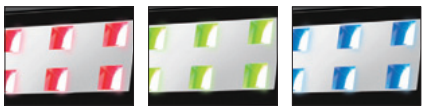
Medium beam

Red type | Green type | Blue type

Weather-proof

ECF0772R/SA1/2.4/W (red type)
ECF0772G/SA1/2.4/W (green type)
ECF0772B/SA1/2.4/W (blue type)
(100 to 240V, 50/60Hz)





Red type | Green type | Blue type

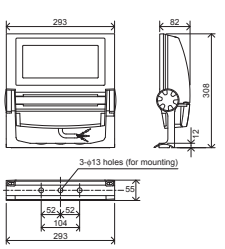
Weather-proof

ECF0772R/SA1/2.4/DG (red type)
ECF0772G/SA1/2.4/DG (green type)
ECF0772B/SA1/2.4/DG (blue type)
(100 to 240V, 50/60Hz)

Power consumption	LED module life
60W (red) 105W (green, blue)	40,000hours

Specifications

Body: Diecast aluminum (polyester paint)
Front cover: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Installation angle: Any position (no limitation)
Weight: 5.5kg

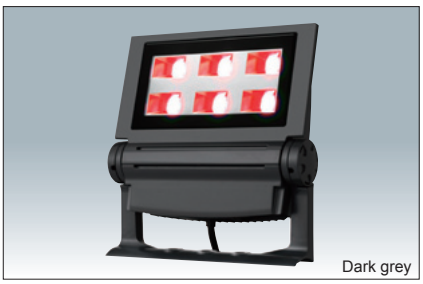


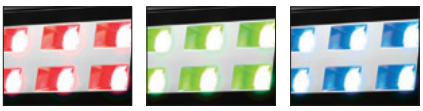
Wide beam

Red type | Green type | Blue type

Weather-proof

ECF0773R/SA1/2.4/W (red type)
ECF0773G/SA1/2.4/W (green type)
ECF0773B/SA1/2.4/W (blue type)
(100 to 240V, 50/60Hz)





Red type | Green type | Blue type

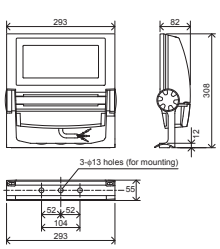
Weather-proof

ECF0773R/SA1/2.4/DG (red type)
ECF0773G/SA1/2.4/DG (green type)
ECF0773B/SA1/2.4/DG (blue type)
(100 to 240V, 50/60Hz)

Power consumption	LED module life
60W (red) 105W (green, blue)	40,000hours

Specifications

Body: Diecast aluminum (polyester paint)
Front cover: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Installation angle: Any position (no limitation)
Weight: 5.5kg



LEDioc FLOOD BROAD

One unit provides the brightness equal to four 160W self-ballasted mercury lamps.
An energy savings of roughly 89%.

- LEDioc FLOOD BROAD features broad light distribution.
- Ideal for sign boards, such as on facades or billboards.
- One lamp can cover a signboard up to 4m wide. The signboard can be viewed in its entirety.

Daylight Weather-proof

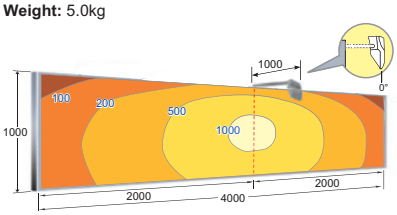
ECF0671N/SA1/2.4/DG

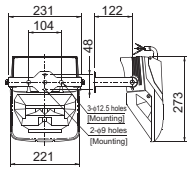
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
3,860ℓm	77W
Luminous efficacy	**LED module life**
50.1ℓm/W	40,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 5,000K	68

Specifications

Body: Diecast aluminum (polyester paint)
Globe: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Installation angle: Any position
Finish color: Dark gray
Weight: 5.0kg





Warm white color Weather-proof

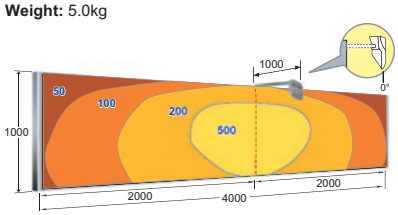
ECF0671LW/SA1/2.4/DG

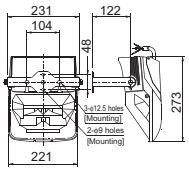
(100 to 240V, 50/60Hz)

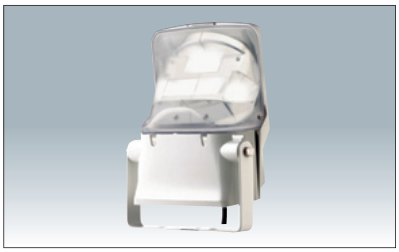
Rated luminous flux (luminaire luminous flux)	Power consumption
2,740ℓm	77W
Luminous efficacy	**LED module life**
35.6ℓm/W	40,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 3,000K	80

Specifications

Body: Diecast aluminum (polyester paint)
Globe: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Installation angle: Any position
Finish color: Dark gray
Weight: 5.0kg







Daylight Weather-proof

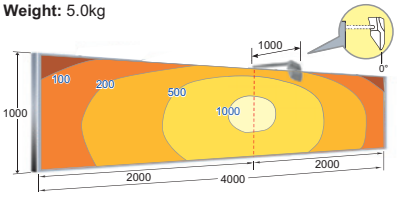
ECF0671N/SA1/2.4/W

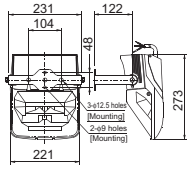
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
3,860ℓm	77W
Luminous efficacy	**LED module life**
50.1ℓm/W	40,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 5,000K	68

Specifications

Body: Diecast aluminum (polyester paint)
Globe: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Installation angle: Any position
Finish color: White
Weight: 5.0kg





Warm white color Weather-proof

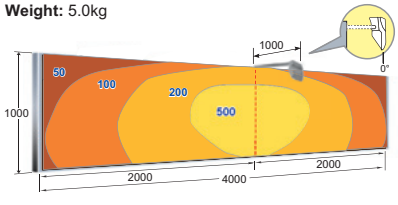
ECF0671LW/SA1/2.4/W

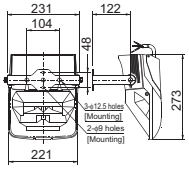
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
2,740ℓm	77W
Luminous efficacy	**LED module life**
35.6ℓm/W	40,000hours
Light color	**Color rendering index (Ra)**
Equivalent to 3,000K	80

Specifications

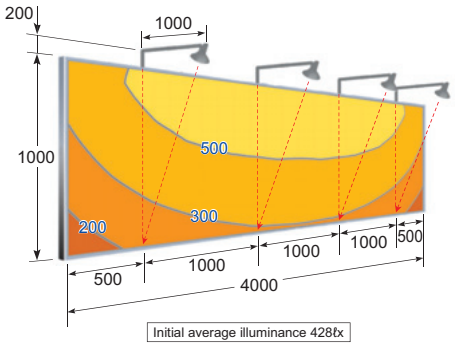
Body: Diecast aluminum (polyester paint)
Globe: Acrylic
Cable: Cabtyre cable (1,500mm outside luminaire)
Installation angle: Any position
Finish color: White
Weight: 5.0kg





Comparison example

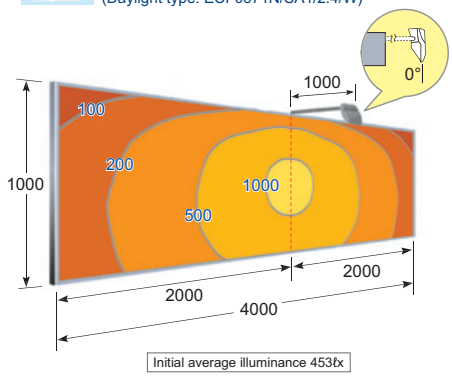
Self ballasted mercury lamp holder
(BHRF100/110V160WH)



Initial average illuminance 428ℓx

Same brightness

LEDioc FLOOD BROAD
(Daylight type: ECF0671N/SA1/2.4/W)



Initial average illuminance 453ℓx

Self ballasted mercury lamp holder for 160W
160W self ballasted mercury lamp (BHRF100/110V160WH)

LEDioc FLOOD BROAD
(Daylight type: ECF0671N/SA1/2.4/W)

Average illuminance

428ℓx

453ℓx

Same brightness

Power consumption*1

672W (168W × 4)

77W (77W × 1)

An energy saving of roughly 89%

Annual CO_2 emissions*2

About 1,156kg of CO_2

About 132kg of CO_2

About a 1,024kg reduction in CO_2

Lifetime

6,000hours

40,000hours

About 6.7 times

*1 Power consumption is calculated by input wattage at rated voltage input.
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

* The horizontal plane illumination distribution diagram above indicates initial values (unit: ℓx).

Options for LEDioc FLOOD series

Arm
95W 24V DC Color

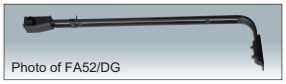


Photo of FA52/DG

600mm type
FA51/DG (dark gray)
FA51/W (white)
900mm type
FA52/DG (dark gray)
FA52/W (white)

Pipe: Steel pipe
Junction box: Diecast aluminum
Weight: 2.1kg (600mm type),
2.4kg (900mm type)
* Thread a ϕ2 to 3 mm diameter stainless wire through the mounting hole and secure both ends (wire is not provided).


Installation example

Arm
50W 35W Broad

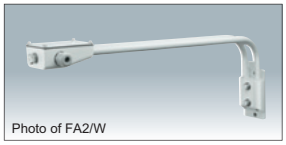


Photo of FA2/W

600mm type
FA2 (dark gray)
FA2/W (white)

Junction box: Diecast aluminum
Pipe: Steel pipe
Weight: 2.0kg
Securing the arm to the luminaire: Use the M10 bolt in the front end of the arm.
Installable 360° upward and downward

Arm
50W 35W Broad

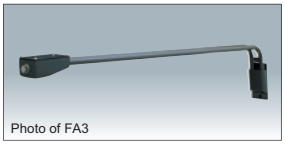


Photo of FA3

900mm type
FA3 (dark gray)
FA3/W (white)

Junction box: Diecast aluminum
Pipe: Steel pipe
Weight: 2.3kg
Securing the arm to the luminaire: Use the M10 bolt in the front end of the arm.
Installable 360° upward and downward

Arm
50W 35W Broad

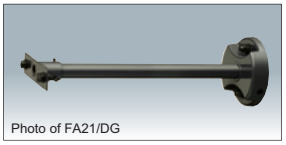
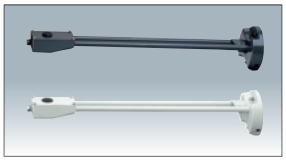


Photo of FA21/DG

400mm type
FA21/DG (dark gray)
FA21/W (white)

Pipe: Steel pipe
Weight: 1.0kg

Arm
50W 35W Broad



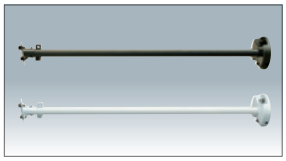
Indoor use

600mm type
FA18 (dark gray)
FA18/W (white)

Pipe: Steel pipe
Junction box: Diecast aluminum
Weight: 1.7kg

* For indoor use. They cannot be used outdoors.

Arm
50W 35W Broad



900mm type
FA19 (dark gray)
FA19/W (white)

Pipe: Steel pipe
Weight: 3.2kg

Flange
95W 24V DC Color

FA53/DG (dark gray)
FA53/W (white)

Material: Diecast aluminum
Weight: 430g


Installation example

Flange
50W 35W Broad

FA17 (dark gray)
FA17/W (white)

Material: Diecast aluminum
Weight: 350g
Installable on both walls and vertical surfaces. The base is water-proof and can also be used on walls outdoors.

Flange
50W 35W Broad

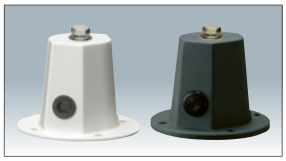

Photo of FA20/DG

FA20/DG (dark gray)
FA20/W (white)

Material: Diecast aluminum
Weight: 250g


Installation example

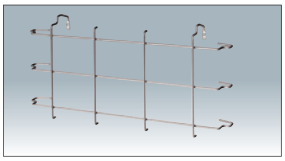
Flange
50W 35W Broad



FA1/DG (dark gray)
FA1/W (white)

Material: Diecast aluminum
Weight: 150g

Guard
95W 24V DC Color

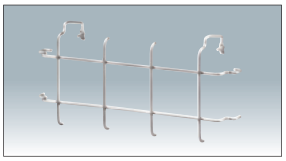


GECF971

Material: Stainless
Weight: 110g


Installation example

Guard
50W 35W



GECF371

Material: Stainless
Weight: 100g


Installation example

95W ·····LEDioc FLOOD NEO 95W

50W ·····LEDioc FLOOD NEO 50W

35W ·····LEDioc FLOOD NEO 35W

24V DC ·····LEDioc FLOOD NEO 24V DC

Color ·····LEDioc FLOOD NEO Color

Broad ·····LEDioc FLOOD Broad

All ·····All LEDioc FLOOD series (Except BLITZ)

Mount bracket for trusses All


Photo of FA-30/BK

Indoor use

FA-30/BK (black)
FA-30/SL (silver)

Applicable pipe: Round pipe with a diameter of ϕ30 to 45mm
Square pipe opening: □45mm
Allowable weight: 20kg or less
Weight: 600g

* A mount bracket for trusses should be used with a bolt for mount bracket.


Installation example

Bolt for mount bracket 95W 24V DC Color


Photo of FA-33/BK

Indoor use

FA-33/BK (black)
FA-33/SL (silver)

Allowable weight: 20kg or less
Weight: 95g

* Use the bolt with the mount bracket for trusses.

Bolt for mount bracket 50W 35W

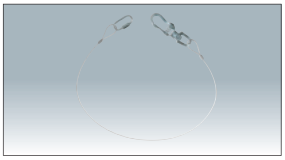

Photo of FA-31/BK

Indoor use

FA-31/BK (black)
FA-31/SL (silver)

Allowable weight: 20kg or less
Weight: 95g

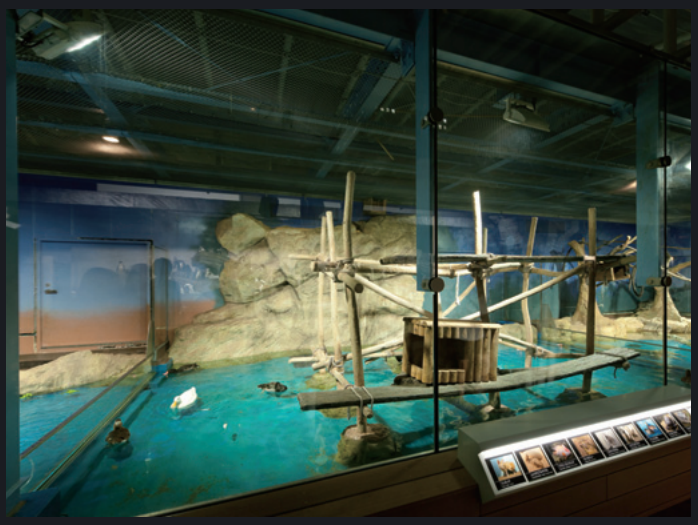
Safety wire All



FA-32

Safety wire designed to prevent the luminaire from falling. Wrap it around the arm of the luminaire and the rail from which it is hung.
Length: 660mm, stainless wire ϕ1.6mm
Weight: 50g

* Be sure to install the safety wire to prevent accidents when the luminaire is used in a location where it could cause damage to property or personal injury by falling.
* When the luminaire will be suspended from a mount bracket for trusses, use our "trade show grade mount bracket."
* These luminaires are not portable and must be installed in a fixed position.
* The luminaire must be connected to ground.


Sunshine Aquarium
(LEDioc FLOOD NEO 95W)


Tennis court at Miyashiro Sports Park
(LEDioc FLOOD BLITZ 400W and 200W types)


Tama Funeral Center, Nikka Funeral Hall
(LEDioc FLOOD BLITZ 200W type, LEDioc FLOOD NEO 95W)


Fukuroda Falls
(LEDioc FLOOD NEO COLOR)

LEDioc
HIGH-BAY Λ (Lambda)

Light-weight and compact LED High-bay luminaire that can replace a 400W metal halide lamp.

- The industry's highest level of high efficacy produces substantial electricity savings.
- 60,000-hour LED module life lowers running costs.
- Initial luminous flux correction controls wasted brightness at start of LED life.
- Dimming function for illumination control.
- Weight reduced to 6.5kg thanks to thorough lightweight design.
- Two types of light distribution provided to better accommodate the installation positioning and height and required brightness.
- Safety wire provided as standard for extra safety in the event of an earthquake or other natural disaster.
- The instant-on capability characteristic of LED lights enables flexible lighting control.
- The soft start function prevents the discomfort caused by exposure to sudden bright light.
- Limited ultraviolet light means limited attraction of insects. Less infrared radiation lowers air conditioning load.

Industry's Highest Level of Efficacy

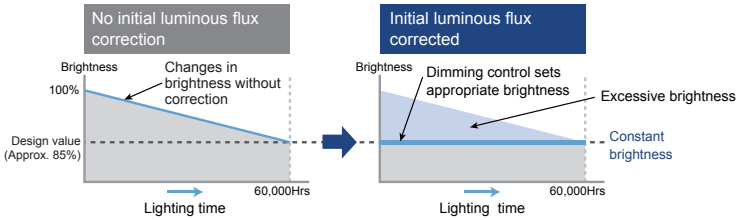
The Lambda luminaire produces a luminous flux (rated) of 24,000ℓm (wide beam type*1) at a power consumption (rated) of 215W. It features the industry's highest luminous efficacy of 111.6ℓm/W*2. It is three times*3 more efficient than high-bay luminaires and 1.5 times more efficient than high-bay metal halide lamps (79.1ℓm/W).

*1 Medium beam: 23,500ℓm *2 Medium beam: 109.3ℓm/W *3 High-bay mercury lamp: 39.5ℓm/W

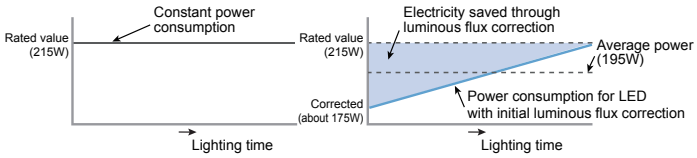
Initial Luminous Flux Correction Controls Wasted Brightness at Start of LED Life

Luminous flux correction is a function that automatically controls the brightness of an LED to ensure that the brightness does not exceed the designed illuminance at the beginning of its life. A timer in the power supply unit keeps track of the total lighting time to maintain a constant level of brightness and reduce power consumption.

• Initial luminous flux correction



• Power consumption comparison (average power)



Dimming Function (Signal Control) for Illumination Control

Supports initial luminous flux correction and dimming via external signal (PWM signal). It is also compatible with lighting control systems for even greater power saving.

Weight Reduce to 6.5kg Thanks to our Exacting Lightweight Design

The lamp housing is made of a lightweight magnesium alloy that has a high specific strength (strength/weight ratio). This has made it possible to lower luminaire weight to 6.5kg, which reduces the impact and strain on the building where it is installed. Installation of high-bay luminaires requires work at heights, so the lighter weight makes it easier and safer to install.

Two types of light distribution provided to better accommodate installation location and height and required brightness

The wide beam model enables even illumination of wide areas, thus achieving a well-balanced lighting environment. In facilities with high ceilings or where the priority is on straight-down illumination, the medium beam model is ideal.

Safety wire provided as standard for extra safety in the event of an earthquake or other natural disaster

A safety wire is provided as a standard accessory to prevent it from falling in the rare event that the installation should be damaged in an earthquake or aftershock. This also increases safety during installation and inspections.

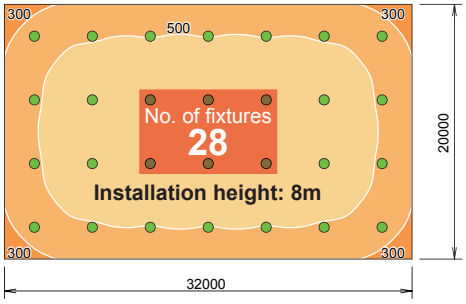
Soft start function prevents discomfort caused by exposure to sudden bright light

LED lighting instantly reaches maximum brightness and this sudden burst of light may be unpleasant to a user. LEDioc HIGH-BAY Λ (Lambda) comes with a soft start function that prolongs lighting over a 2-second period to reduce discomfort.

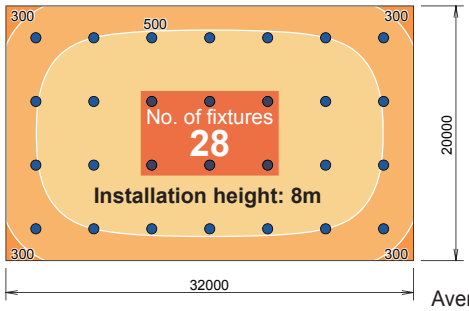
Comparison Example

Comparsion with 400W Metal Halide Lamp

Adjacent Ballast/High-bay Shade+400W Metal Halide Lamp
(HB4020A03+SAW415 (wide distribution type) +MF400LSH2/BUP)

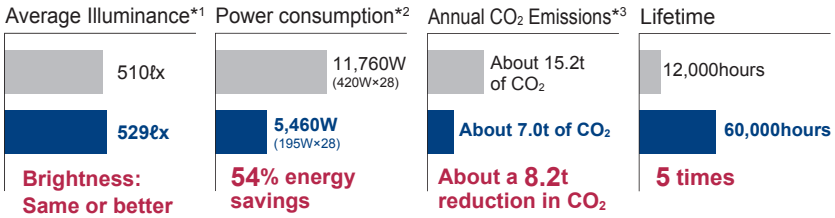


LEDioc HIGH-BAY Λ (Lambda)
(EHCL22203DN/SA1/2/2.4)



Adjacent Ballast/High-bay Shade +400W Metal Halide Lamp
(SAW413)

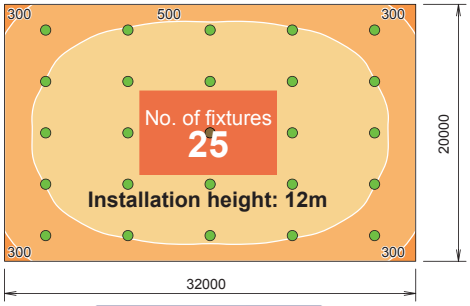
LEDioc HIGH-BAY Λ (Lambda) Wide beam
(EHCL22203DN/SA1/2/2.4)



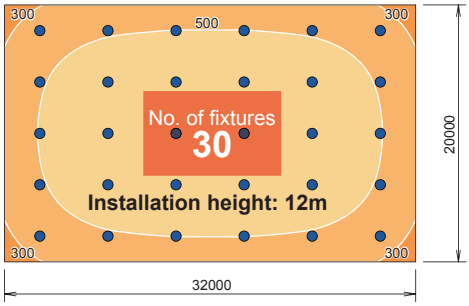
*1 Maintenance factor for metal halide lamp: 0.49; for the LED:0.68
*2 Power consumption is for a 200V metal halide lamp (standard HPF ballast) and the average power consumption value for an LED lamp equipped with initial luminous flux correction.
*3 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

Comparison with 700W Mercury Lamp

Adjacent Ballast/High-bay Shade+700W Mercury Lamp
(HB7020A03+SAW713 (wide distribution type) +HF700X)

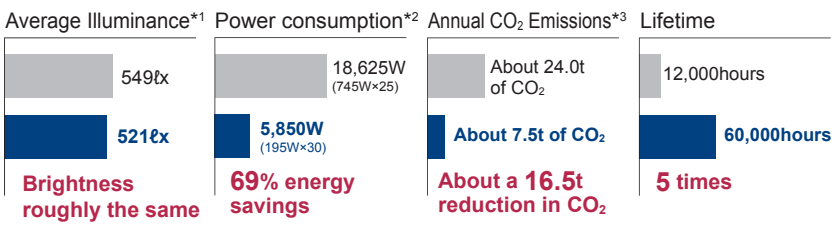


LEDioc HIGH-BAY Λ (Lambda)
(EHCL22202DN/SA1/2/2.4)



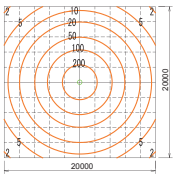
Adjacent Ballast/High-bay Shade +700W Mercury Lamp
(SAW713)

LEDioc HIGH-BAY Λ (Lambda) Medium Beam
(EHCL22202DN/SA1/2/2.4)



*1 Maintenance factor for mercury lamp: 0.71; for the LED:0.68
*2 Power consumption is for a 200V metal halide lamp (standard HPF ballast) and the average power consumption value for an LED lamp equipped with initial luminous flux correction.
*3 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

With initial luminous flux correction



Medium Beam

EHCL22202DN/SA1/2/2.4

(100/200 to 242V, 50/60Hz)

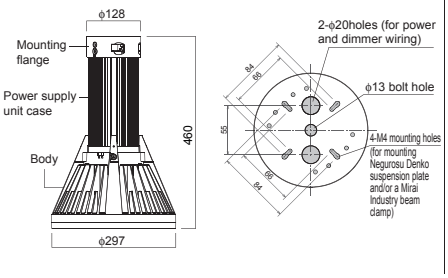
Rated luminous flux (luminaire luminous flux)	Power Consumption
23,500ℓm	215W (100V/200V) 214W (242V)

Luminous Efficacy
109.3ℓm/W (100V/200V) 109.8ℓm/W (242V)

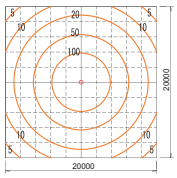
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K	70

Specifications

Body: Magnesium alloy
Power supply unit case: Extruded aluminum
Globe: Acrylic
Finish color: White
Weight: 6.5kg
Safety wire provided



With initial luminous flux correction



Wide beam

EHCL22203DN/SA1/2/2.4

(100/200 to 242V, 50/60Hz)

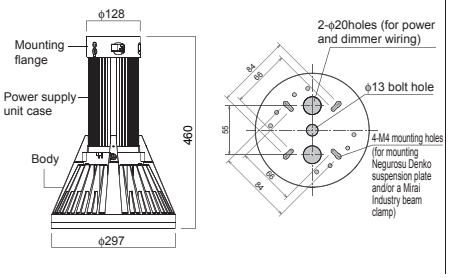
Rated luminous flux (luminaire luminous flux)	Power Consumption
24,000ℓm	215W (100V/200V) 214W (242V)

Luminous Efficacy
111.6ℓm/W (100V/200V) 112.1ℓm/W (242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K	70

Specifications

Body: Magnesium alloy
Power supply unit case: Extruded aluminum
Globe: Acrylic
Finish color: White
Weight: 6.5kg
Safety wire provided



* Cool white (equivalent to 4,000K), warm white (equivalent to 3,000K) can be special ordered.

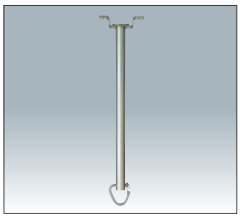
Cool white: EHCL22202DW/SA1/2/2.4
Warm white: EHCL22202DLW/SA1/2/2.4

Cool white: EHCL22203DW/SA1/2/2.4
Warm white: EHCL22203DLW/SA1/2/2.4

Eyebolt

HB-I-BOLT/M10

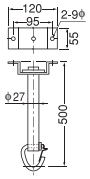
High-bay shade
Required with FB11, 21, 31 pipe pendants.
Material: Steel
With M10 nut

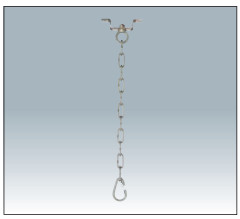


Pipe pendant

FB11

Finish: Electro-galvanizing
Weight: 1.1kg

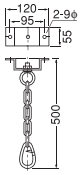


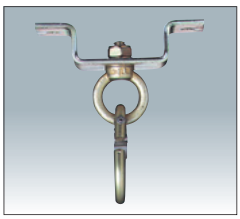


Chain pendant

FB21

Finish: Electro-galvanizing
Weight: 700g

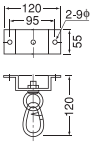




Hook pendant

FB31

Finish: Electro-galvanizing
Weight: 450g



Overall guard

TGHCL221

Specifications

Body: Low carbon steel wire rods
Mounting plate: Steel
Weight: 5.6kg

Front guard

GEHCL221

Specifications

Body: Low carbon steel wire rods
Weight: 0.7kg

Front diffuse cover

PEHCL221

Specifications

Body: Low carbon steel wire rods
Panel: Polycarbonate
Weight: 0.9kg

Manual dimmer

ITACS-self Manual Dimmer

I.DF-70162-PD

<100 to 242V>

* In combination with a LEDioc High-bay Lambda, capable of continuous, no-step dimming from 100% down to 15%.
* Maximum number of dimmable units: 50
(If power is turned ON/OFF with a manual dimmer switch, the maximum is 6 lights.)
* Rated capacity of switch: 15A

* The horizontal plane illumination distribution diagram above indicates initial values (unit: ℓx).

LEDioc
CEILING HB
High-output type

CEILING light
Type F

CEILING light
Type V

Higher brightness than a 400W metal halide lamp
Output power: 20,000ℓm

Combining LED features with high quality light distribution control has allowed us to manufacture high-bay luminaires with a high efficacy of 105ℓm/W.
Two configurations offered in three types of beam distribution make it easy to find a model that suits your application.

Area light
Type F

Area light
Type V

For details on area light types, see page 37.

High efficacy of 105ℓm/W (Daylight type)

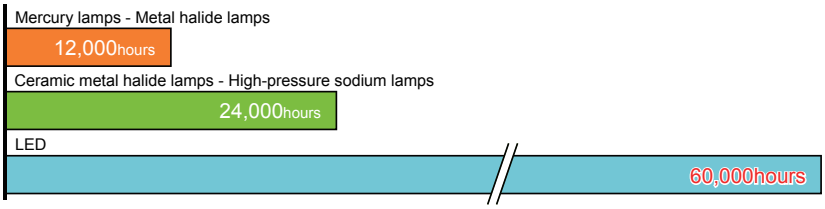
The rated luminous flux (luminaire luminous flux) is 20,000ℓm and as an LED luminaire it possesses a luminous efficacy of 105ℓm, the highest in the industry.

Weather-proof Type Suitable for Direct Contact with Rain

The weather-proof design of the high-bay fixture allows them to be used in direct contact with rain. This makes them particularly well-suited as an energy saving measure for gas stations or large-scale warehouses with a lot of frontage, or for factories or the entrances (eaves) of big-box stores.

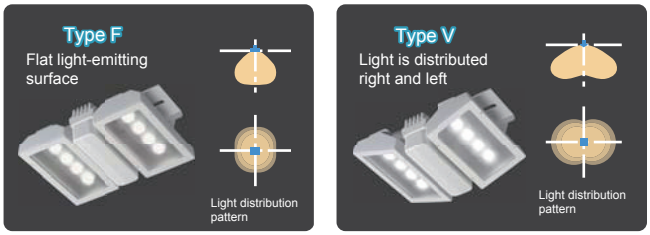
Long life of 60,000hours

The LEDioc CEILING light provides a LED module life of 60,000hours*. It boasts a life that is more than 2.5 times that of an HID lamp, which contributes to substantial cost savings. *Characteristics at an ambient temperature of 25°C.



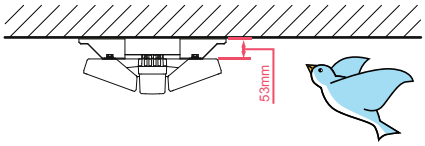
Extensive product lineup

The LEDioc CEILING Type F has a flat light-emitting surface that suppresses light pollution, while the Type V distributes light more widely to the right and left. Each comes in a lineup that features narrow, medium and wide beam distribution models. This allows you to select the model that best suits your needs.



Bird dropping control

The clearance between the ceiling and the luminaire is a mere 53mm. The close fit between the ceiling and the luminaire prevents accumulation of droppings from birds and other small animals.



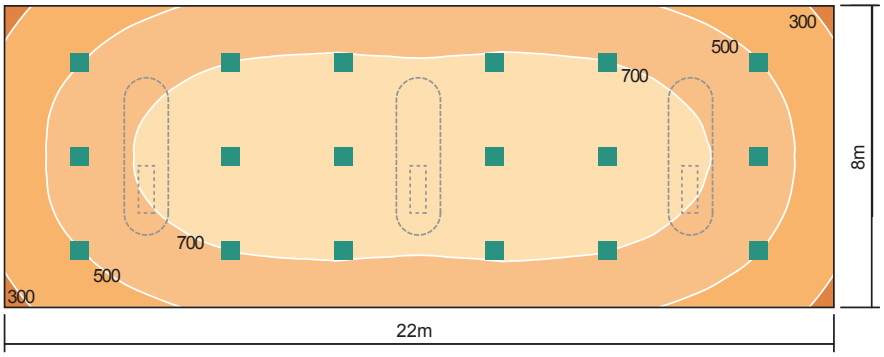
Low insect attraction

The LED emits hardly any light in the ultraviolet range that insects like and therefore attracts fewer insects.

Design example: Undercanopy lighting

400W metal halide lamp luminaire for gas stations

(HSTD402)
400W metal halide lamp
(MT400LSH/BH)



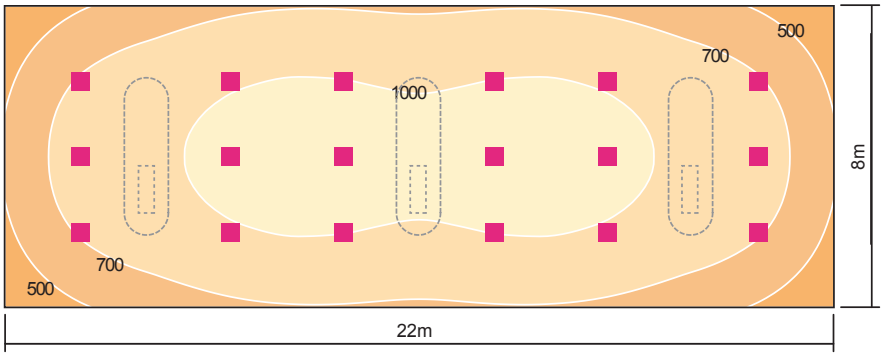
Design conditions
Height of luminaire: 5.0m
Fixtures installed: 18
Maintenance ratio: 0.47

Average illuminance: 641ℓx

LEDioc CEILING HB High-output Type V Wide beam

(EHCL19723N/SA1/2.4)

About 1.3 times as bright



Design conditions
Height of luminaire: 5.0m
Fixtures installed: 18
Maintenance ratio: 0.77

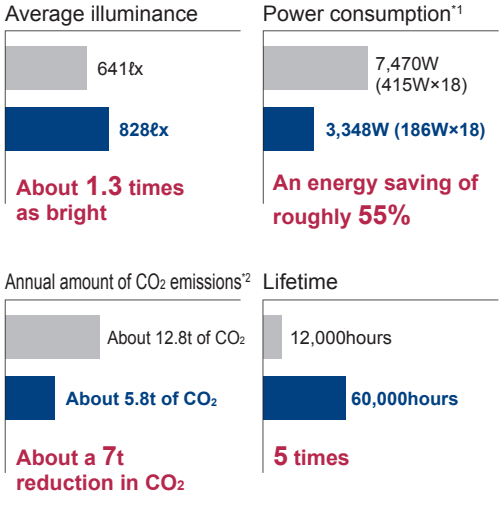
Average illuminance: 828ℓx

* The numbers on the curves indicate illuminance maintenance values of irradiation areas in ℓx units.

Comparison example

400W metal halide lamp luminaire for gas stations
(HSTD402)
400W metal halide lamp
(MT400LSH/BH)

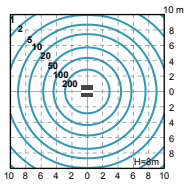
LEDioc CEILING HB High-output Type V Wide beam
(EHCL19723N/SA1/2.4)



*1 Indicates power consumption when used with a 200V power supply.
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

Type F High-output

Narrow beam



Weather-proof

EHCL19711N/SA1/2.4

(Luminaire: EHCL19711N/SA1/2.4−0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
20,000ℓm	190W (100V) 186W (200V) 185W (240V)

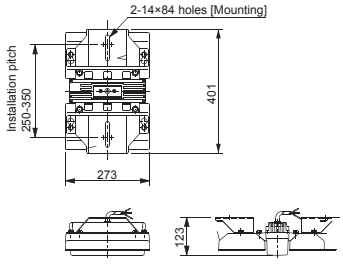
Luminous efficacy
105.3ℓm/W (100V) 107.5ℓm/W (200V) 108.1ℓm/W (240V)

LED module life	Light color	Color rendering index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	70

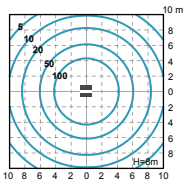
Specifications

Body: Diecast aluminum
Frame: Diecast aluminum
Front glass: Embossed glass
Bracket: Stainless
Finish color: White
Weight: 10.7kg

* Above characteristics are available at an ambient temperature of +25°C.



Medium beam



Weather-proof

EHCL19712N/SA1/2.4

(Luminaire: EHCL19712N/SA1/2.4−0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
20,000ℓm	190W (100V) 186W (200V) 185W (240V)

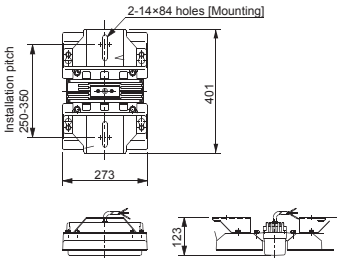
Luminous efficacy
105.3ℓm/W (100V) 107.5ℓm/W (200V) 108.1ℓm/W (240V)

LED module life	Light color	Color rendering index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	70

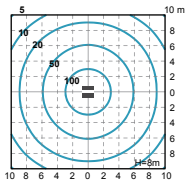
Specifications

Body: Diecast aluminum
Frame: Diecast aluminum
Front glass: Embossed glass
Bracket: Stainless
Finish color: White
Weight: 10.7kg

* Above characteristics are available at an ambient temperature of +25°C.



Wide beam



Weather-proof

EHCL19713N/SA1/2.4

(Luminaire: EHCL19713N/SA1/2.4−0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
20,000ℓm	190W (100V) 186W (200V) 185W (240V)

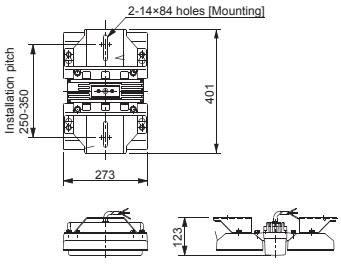
Luminous efficacy
105.3ℓm/W (100V) 107.5ℓm/W (200V) 108.1ℓm/W (240V)

LED module life	Light color	Color rendering index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	70

Specifications

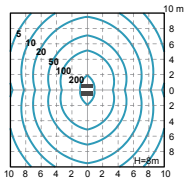
Body: Diecast aluminum
Frame: Diecast aluminum
Front glass: Embossed glass
Bracket: Stainless
Finish color: White
Weight: 10.7kg

* Above characteristics are available at an ambient temperature of +25°C.



Type V High-output

Narrow beam



Weather-proof

EHCL19721N/SA1/2.4

(Luminaire: EHCL19721N/SA1/2.4−0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
20,000ℓm	190W (100V) 186W (200V) 185W (240V)

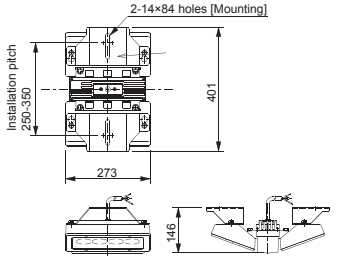
Luminous efficacy
105.3ℓm/W (100V) 107.5ℓm/W (200V) 108.1ℓm/W (240V)

LED module life	Light color	Color rendering index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	70

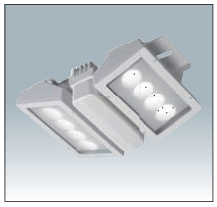
Specifications

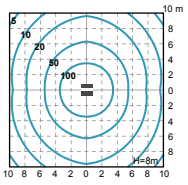
Body: Diecast aluminum
Frame: Diecast aluminum
Front glass: Embossed glass
Bracket: Stainless
Finish color: White
Weight: 10.7kg

* Above characteristics are available at an ambient temperature of +25°C.



Medium beam





Weather-proof

EHCL19722N/SA1/2.4

(Luminaire: EHCL19722N/SA1/2.4−0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
20,000ℓm	190W (100V) 186W (200V) 185W (240V)

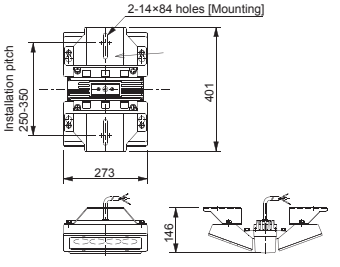
Luminous efficacy
105.3ℓm/W (100V) 107.5ℓm/W (200V) 108.1ℓm/W (240V)

LED module life	Light color	Color rendering index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	70

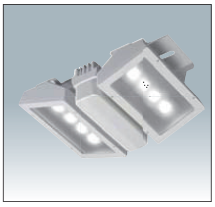
Specifications

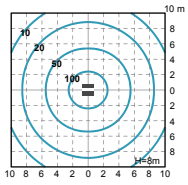
Body: Diecast aluminum
Frame: Diecast aluminum
Front glass: Embossed glass
Bracket: Stainless
Finish color: White
Weight: 10.7kg

* Above characteristics are available at an ambient temperature of +25°C.



Wide beam





Weather-proof

EHCL19723N/SA1/2.4

(Luminaire: EHCL19723N/SA1/2.4−0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power consumption
20,000ℓm	190W (100V) 186W (200V) 185W (240V)

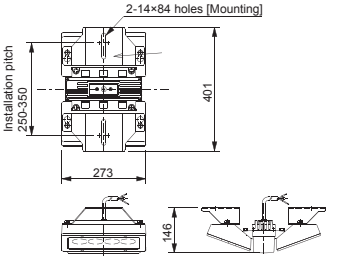
Luminous efficacy
105.3ℓm/W (100V) 107.5ℓm/W (200V) 108.1ℓm/W (240V)

LED module life	Light color	Color rendering index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	70

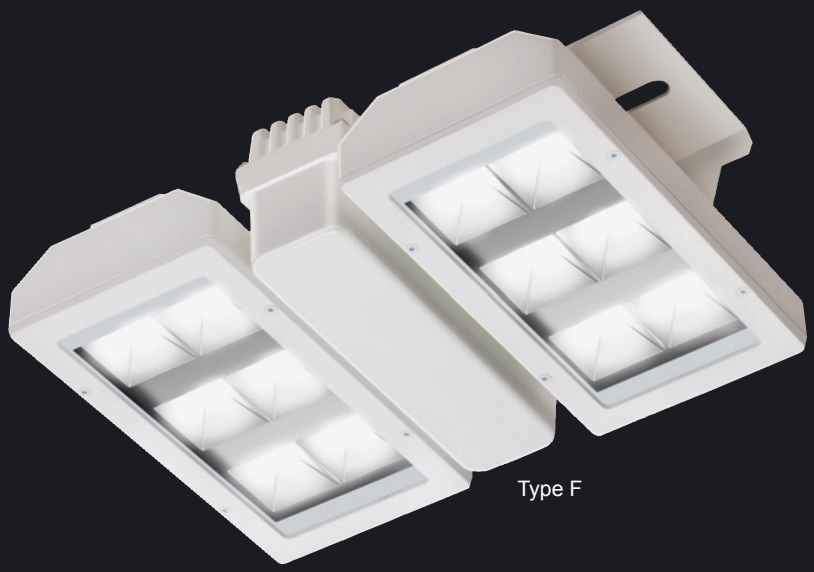
Specifications

Body: Diecast aluminum
Frame: Diecast aluminum
Front glass: Embossed glass
Bracket: Stainless
Finish color: White
Weight: 10.7kg

* Above characteristics are available at an ambient temperature of +25°C.



* Above illuminance indicates initial values (unit: ℓx).



Type F

Type V

LEDioc CEILING HB Standard and Dimmable types

Approximately 57% energy savings over a 400W metal halide lamp or 400W mercury lamp.

- Type F that ensures illumination below the luminaire and Type V that lights up a large area.
- Maintains the same brightness as 400W metal halide or mercury lamps.

High-power, 2× LEDioc FLOOD NEOs 95W

High-power LEDs (Daylight: 16,800ℓm and warm white: 11,940ℓm: Our LEDs with their outstanding luminous flux) achieve a maximum luminaire luminous flux of 13,800ℓm (Type V, wide-beam, daylight), making for a practical, high-bay LED luminaire.

Extensive Product Lineup

Our lineup includes narrow, medium and wide beam types for both the Type F, which cuts down on light pollution and the Type V, which illuminates a large area. You can choose the light color to suit your application from a daylight type (equivalent to 5,000K) or a warm white (equivalent to 3,000K).

Perfect for Lighting Renovations

With the installation pitch (300mm) of existing Service station luminaires (Iwasaki) in mind, we designed our ceiling mounting hardware to work over a wide range, from 250mm to 350mm.

Suppresses Bird Droppings at Service Stations

The clearance between the ceiling and the luminaire is a mere 53mm. The close fit between the ceiling and the luminaire prevents accumulation of droppings from birds and other small animals.

For LEDioc CEILING HB Initial luminous flux correction unit

When a timer unit is connected, which automatically dims the light in line with LED luminaire lumen maintenance, it dims it to the designed luminous flux when newly installed (approx. 70% of initial luminous flux), thus realizing energy savings. Also, since this reduces the load on the LED and power supply unit, the service life of LEDiocCeilingHB is extended to up to 60,000hours (standard 40,000hours).

For LEDioc CEILING HB
Initial luminous flux correction unit
ILSDM02A-HB

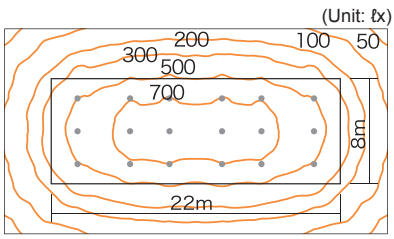
- By connecting the applicable unit to a power supply synchronized with the LEDioc CEILING HB, it automatically counts the time in use and controls the dimming ratio based on the cumulative time, dimming the luminaire accordingly.
- A maximum of 24 LEDioc CEILING HB luminaires can be connected per compatible unit.
- The maximum wire length of 200m can broaden the options for installation locations. (Signal wire: when used,CPEVϕ0.9)
- Complies to IP65 for excellent waterproof performance.
- Any position--unrestricted installation orientation.
- Power consumption of 3W makes for a true low-power control unit.

Comparison Example

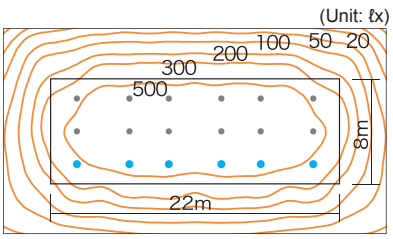
●Design example: Service station illumination (under canopy)

Service station luminaire for metal halide lamps
(HSD478+MT400LSH/BH)

LEDioc CEILING HB
(EHCL18713N/SA1/2.4
+EHCL18723N/SA1/2.4)



Same brightness



Design conditions:
Installation Height: 5.0m Maintenance factor: 0.5
Installed Quantity: 18

Design conditions:
Installation Height: 5.0m Maintenance factor: 0.63
Installed Quantity: 18
• EHCL18713N/SA1/2.4
• EHCL18723N/SA1/2.4

Service station luminaire for metal halide lamps
(HSD478+MT400LSH/BH)

LEDioc CEILING HB
(EHCL18713N/SA1/2.4
+EHCL18723N/SA1/2.4)

Average illuminance
(under canopy)

603ℓx

586ℓx

Same brightness

Power consumption*1

7,470W
(415W×18)

3,240W
(180W×18)

An energy saving of roughly 57%

Annual CO_2 Emissions*2

12.8t of CO_2

5.6t of CO_2

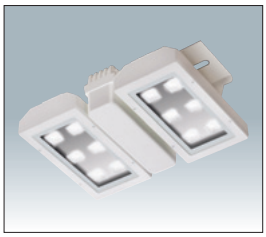
About 7.2t reduction of CO_2

*1 Power consumption based on input voltages, mercury lamp: 200V (standard HPF ballast), metal halide lamp: 200V (standard HPF ballast) LED: 200V.
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

* The horizontal illumination distribution diagram above indicates illuminance maintenance values (unit: ℓx).

Type F Standard

Narrow Beam




Weather-proof

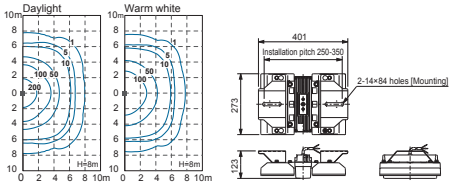
EHCL18711N/SA1/2.4 (Daylight)
(Body: EHCL18711N/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

EHCL18711LW/SA1/2.4 (Warm white)
(Body: EHCL18711LW/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

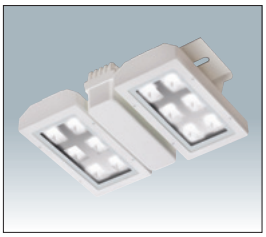
Rated luminous flux (luminaire luminous flux)	
10,900ℓm (Daylight), 7,750ℓm (Warm white)	
Power Consumption	**Luminous Efficacy**
180W	60.6ℓm/W (Daylight), 43.1ℓm/W (Warm white)
LED Module Life	**Light Color**
40,000hours	Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)
Color Rendering Index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg



Medium Beam




Weather-proof

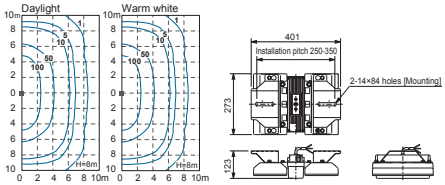
EHCL18712N/SA1/2.4 (Daylight)
(Body: EHCL18712N/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

EHCL18712LW/SA1/2.4 (Warm white)
(Body: EHCL18712LW/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

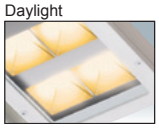
Rated luminous flux (luminaire luminous flux)	
12,300ℓm (Daylight), 8,740ℓm (Warm white)	
Power Consumption	**Luminous Efficacy**
180W	68.3ℓm/W (Daylight), 48.6ℓm/W (Warm white)
LED Module Life	**Light Color**
40,000hours	Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)
Color Rendering Index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg



Wide beam

Weather-proof

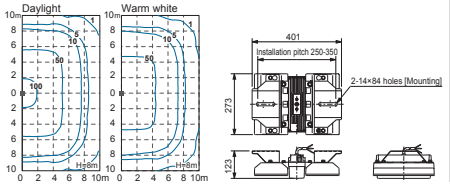
EHCL18713N/SA1/2.4 (Daylight)
(Body: EHCL18713N/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

EHCL18713LW/SA1/2.4 (Warm white)
(Body: EHCL18713LW/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	
13,600ℓm (Daylight), 9,660ℓm (Warm white)	
Power Consumption	**Luminous Efficacy**
180W	75.6ℓm/W (Daylight), 53.7ℓm/W (Warm white)
LED Module Life	**Light Color**
40,000hours	Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)
Color Rendering Index (Ra)	
68 (Daylight) 80 (Warm white)	

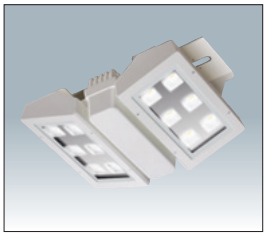
Specifications

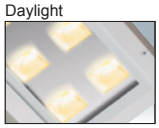
Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg



Type V Standard

Narrow Beam



Weather-proof

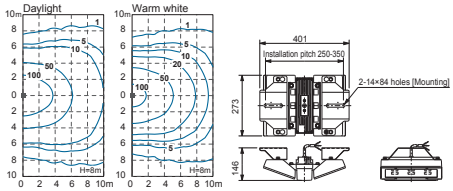
EHCL18721N/SA1/2.4 (Daylight)
(Body: EHCL18721N/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

EHCL18721LW/SA1/2.4 (Warm white)
(Body: EHCL18721LW/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

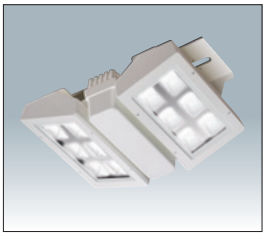
Rated luminous flux (luminaire luminous flux)	
11,930ℓm (Daylight), 8,470ℓm (Warm white)	
Power Consumption	**Luminous Efficacy**
180W	66.3ℓm/W (Daylight), 47.1ℓm/W (Warm white)
LED Module Life	**Light Color**
40,000hours	Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)
Color Rendering Index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg



Medium Beam




Weather-proof

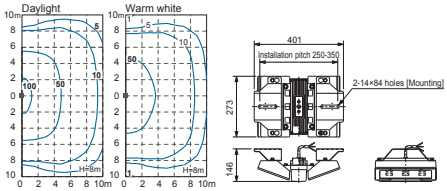
EHCL18722N/SA1/2.4 (Daylight)
(Body: EHCL18722N/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

EHCL18722LW/SA1/2.4 (Warm white)
(Body: EHCL18722LW/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

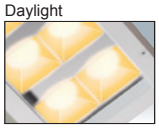
Rated luminous flux (luminaire luminous flux)	
13,320ℓm (Daylight), 9,460ℓm (Warm white)	
Power Consumption	**Luminous Efficacy**
180W	74.0ℓm/W (Daylight), 52.6ℓm/W (Warm white)
LED Module Life	**Light Color**
40,000hours	Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)
Color Rendering Index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg



Wide beam

Weather-proof

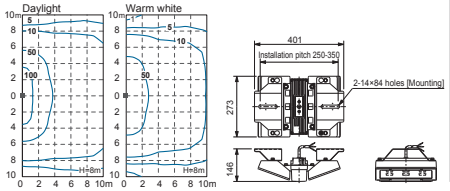
EHCL18723N/SA1/2.4 (Daylight)
(Body: EHCL18723N/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

EHCL18723LW/SA1/2.4 (Warm white)
(Body: EHCL18723LW/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	
13,800ℓm (Daylight), 9,800ℓm (Warm white)	
Power Consumption	**Luminous Efficacy**
180W	76.7ℓm/W (Daylight), 54.4ℓm/W (Warm white)
LED Module Life	**Light Color**
40,000hours	Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)
Color Rendering Index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

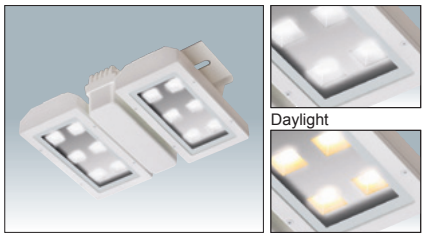
Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg



* The horizontal plane illumination distribution diagram above indicates initial values (unit: ℓx).

Type F Dimmable

Narrow Beam



Weather-proof

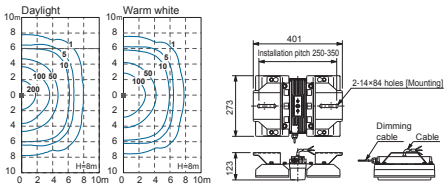
EHCL18711DN/SA1/2.4 (Daylight)
(Body: EHCL18711DN/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

EHCL18711DLW/SA1/2.4 (Warm white)
(Body: EHCL18711DLW/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

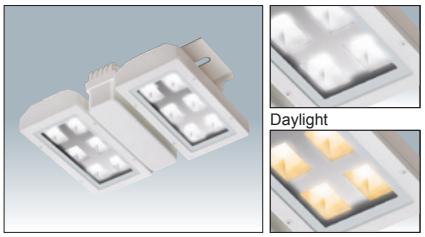
Rated luminous flux (luminaire luminous flux)	
10,900ℓm (Daylight), 7,750ℓm (Warm white)	
Power Consumption	Luminous Efficacy
180W	60.6ℓm/W (Daylight), 43.1ℓm/W (Warm white)
LED Module Life	Light Color
40,000hours	Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)
Color Rendering Index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg



Medium Beam



Weather-proof

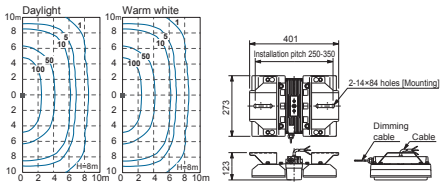
EHCL18712DN/SA1/2.4 (Daylight)
(Body: EHCL18712DN/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

EHCL18712DLW/SA1/2.4 (Warm white)
(Body: EHCL18712DLW/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

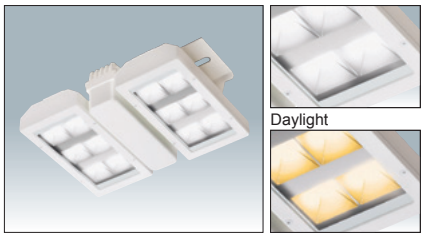
Rated luminous flux (luminaire luminous flux)	
12,300ℓm (Daylight), 8,740ℓm (Warm white)	
Power Consumption	Luminous Efficacy
180W	68.3ℓm/W (Daylight), 48.6ℓm/W (Warm white)
LED Module Life	Light Color
40,000hours	Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)
Color Rendering Index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg



Wide beam



Weather-proof

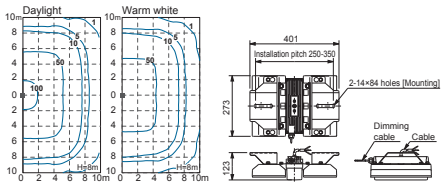
EHCL18713DN/SA1/2.4 (Daylight)
(Body: EHCL18713DN/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

EHCL18713DLW/SA1/2.4 (Warm white)
(Body: EHCL18713DLW/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	
13,600ℓm (Daylight), 9,660ℓm (Warm white)	
Power Consumption	Luminous Efficacy
180W	75.6ℓm/W (Daylight), 53.7ℓm/W (Warm white)
LED Module Life	Light Color
40,000hours	Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)
Color Rendering Index (Ra)	
68 (Daylight) 80 (Warm white)	

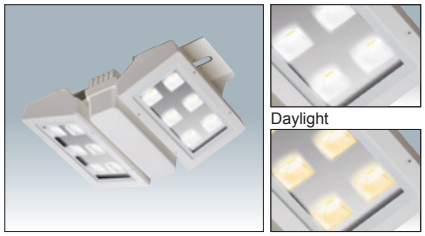
Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg



Type V Dimmable

Narrow Beam



Weather-proof

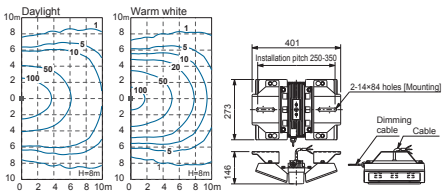
EHCL18721DN/SA1/2.4 (Daylight)
(Body: EHCL18721DN/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

EHCL18721DLW/SA1/2.4 (Warm white)
(Body: EHCL18721DLW/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

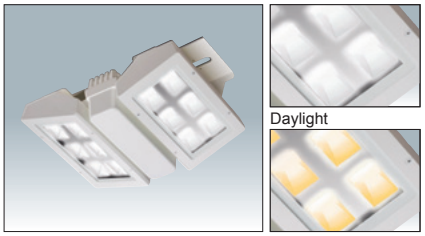
Rated luminous flux (luminaire luminous flux)	
11,930ℓm (Daylight), 8,470ℓm (Warm white)	
Power Consumption	Luminous Efficacy
180W	66.3ℓm/W (Daylight), 47.1ℓm/W (Warm white)
LED Module Life	Light Color
40,000hours	Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)
Color Rendering Index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg



Medium Beam



Weather-proof

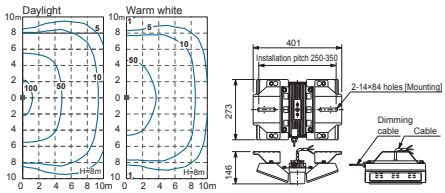
EHCL18722DN/SA1/2.4 (Daylight)
(Body: EHCL18722DN/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

EHCL18722DLW/SA1/2.4 (Warm white)
(Body: EHCL18722DLW/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

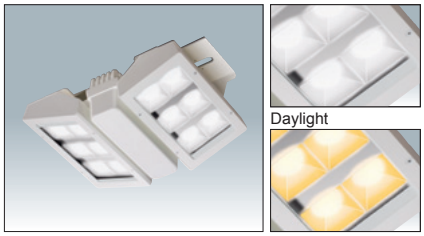
Rated luminous flux (luminaire luminous flux)	
13,320ℓm (Daylight), 9,460ℓm (Warm white)	
Power Consumption	Luminous Efficacy
180W	74.0ℓm/W (Daylight), 52.6ℓm/W (Warm white)
LED Module Life	Light Color
40,000hours	Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)
Color Rendering Index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg



Wide beam



Weather-proof

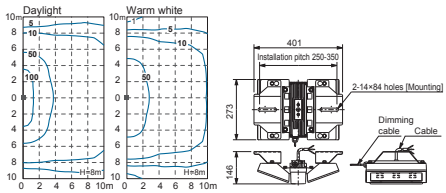
EHCL18723DN/SA1/2.4 (Daylight)
(Body: EHCL18723DN/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

EHCL18723DLW/SA1/2.4 (Warm white)
(Body: EHCL18723DLW/SA1/2.4-0 + bracket: AEHCL11)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	
13,800ℓm (Daylight), 9,800ℓm (Warm white)	
Power Consumption	Luminous Efficacy
180W	76.7ℓm/W (Daylight), 54.4ℓm/W (Warm white)
LED Module Life	Light Color
40,000hours	Equivalent to 5,000K (Daylight), equivalent to 3,000K (Warm white)
Color Rendering Index (Ra)	
68 (Daylight) 80 (Warm white)	

Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg



* The horizontal plane illumination distribution diagram above indicates initial values (unit: ℓx).
* The LED module life of 60,000hours indicated applies when used in combination with an initial luminous flux correction unit (ILSDM02A-HB).

Inaba Denki Sangyo (KK) Fukuoka Plant
(LEDioc HIGH-BAY Λ)

Tokyo Engineering Systems (Co.) Hanyu Factory
(LEDioc HIGH-BAY Λ)

Oberlin University
(LEDioc HIGH-BAY Λ)

Matsubushi Kanasugi Elementary School
(LEDioc CEILING HB High-output)

Otaki Nishihata Elementary School
(LEDioc CEILING HB Dimmable)

Asano Gear Co. Factory
(LEDioc CEILING HB)

Komatsu Ibaraki Plant
(LEDioc CEILING HB)

ENEOS Dr. Drive New Town East Station
(LEDioc CEILING HB)

Otoyo Gas Station
(LEDioc CEILING HB)

Kanazawa Sekiyu Co. Nogata South Self-service Station
(LEDioc CEILING HB)

Mago Sports Hall
(LEDioc CEILING HB)

Accordia Garden Kashiwara
(LEDioc CEILING HB)

LEDiOC LED Downlights

Class 900 (Daylight type)

Class 900 (Warm white type)

Extensive variety

A wide variety, from the equivalent of a 150W compact metal halide lamp to that of a 60W incandescent.

New high-bay (ϕ250/200) lineup

A new lineup of large-diameter recessed luminaires (ϕ250/200) for high-bay installations.

A three light-color lineup

In addition to refreshing daylight and warm white bulbs, the lineup includes a natural white light in the white type.

Light color

Equivalent to 5,000K (Daylight)

Equivalent to 3,400K (White)

Equivalent to 2,900K (Warm white)

Long Life

LED modules have a long service life of 60,000hours (maximum length). This substantially cuts maintenance costs.

Equipped with a soft start function

Equipped with a soft start function, which reduces the sudden, dazzling change in brightness when lights are turned on. (Not available for some)

■ Comparison when replacing a conventional light source (HID compact type fluorescent lamp) to LED downlights.

Comparison per light <Class 900>

	HDW150W01BHE (MT150SW)		EDL127000DN/SA9 (Class 900)
Luminaire luminous flux	8,760ℓm	About the same	8,640ℓm
Power Consumption	171W	About 26.3% decrease	127W
Luminous Efficacy	69.8ℓm/W	About the same	68.0ℓm/W
Lifetime	90,000Hrs	About 5.5 times	90,000Hrs

Comparison per light <Class 200>

	FHDW42W01ERFH9 (FHT42W)		EDL24202N/SA9 (Class 200)
Luminaire luminous flux	2,020ℓm	About 0.95 times	1,910ℓm
Power Consumption	45W	About 46.3% decrease	24.2W
Luminous Efficacy	43.2ℓm/W	About 1.8 times	78.9ℓm/W
Lifetime	10,000 Hrs	About 6 times	60,000Hrs

Comparison per light <Class 700>

	HDW3001/W (MT100SW)		EDL89000N/SA9 (Class 700)
Luminaire luminous flux	4,900ℓm	About 1.4 times	6,940ℓm
Power Consumption	112W	About 20.5% decrease	89W
Luminous Efficacy	43.8ℓm/W	About 1.8 times	78.0ℓm/W
Lifetime	6,000Hrs	About 8.3 times	50,000Hrs

Comparison per light <Class 150>

	FHDW42W01ERFH9 (FHT32W)		EDL19602N/SA9 (Class 150)
Luminaire luminous flux	1,600ℓm	About the same	1,570ℓm
Power Consumption	33W	About 40.6% decrease	19.6W
Luminous Efficacy	48.5ℓm/W	About 1.7 times	80.1ℓm/W
Lifetime	10,000Hrs	About 6 times	60,000Hrs

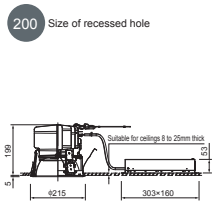
Comparison per light <Class 500>

	HDW3001/W (MT70SW)		EDL71000N/SA9 (Class 500)
Luminaire luminous flux	3,500ℓm	About 1.6 times	5,460ℓm
Power Consumption	81W	About 12.3% decrease	71W
Luminous Efficacy	43.2ℓm/W	About 1.8 times	76.9ℓm/W
Lifetime	6,000Hrs	About 8.3 times	50,000Hrs

Comparison per light <Class 100>

	FHDW2402ERH9 (FHT24W)		EDL13302N/SA9 (Class 150)
Luminaire luminous flux	1,170ℓm	About 0.8 times	1,060ℓm
Power Consumption	27W	About 50% decrease	13.3W
Luminous Efficacy	43.3ℓm/W	About 1.8 times	79.7ℓm/W
Lifetime	10,000Hrs	About 6 times	60,000Hrs

Class 900 (Equivalent to 150W compact metal halide lamp)*2



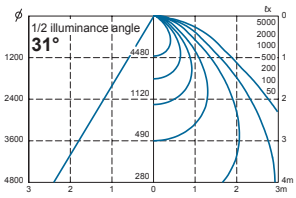
Continuous dimmable type (5 to 100%)

EDL127000DN/SA9
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
8,640ℓm	127W to 124W
Luminous Efficacy	**LED Module Life**
68.0ℓm/W to 69.7ℓm/W	50,000hours
Light Color	**Color Rendering Index (Ra)**
Equivalent to 5,000K (Daylight)	70

Specifications
Body: Diecast aluminum
Frame: Steel plate
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 4.8kg

* Non heat insulating construction.



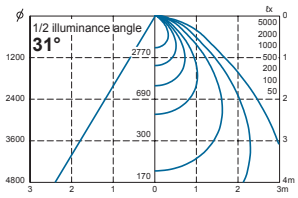
Continuous dimmable type (5 to 100%)

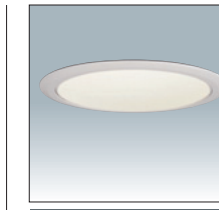
EDL127000DWW/SA9
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
5,340ℓm	127W to 124W
Luminous Efficacy	**LED Module Life**
42.0ℓm/W to 43.1ℓm/W	50,000hours
Light Color	**Color Rendering Index (Ra)**
Equivalent to 3,400K (White)	90

Specifications
Body: Diecast aluminum
Frame: Steel plate
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 4.8kg

* Non heat insulating construction.





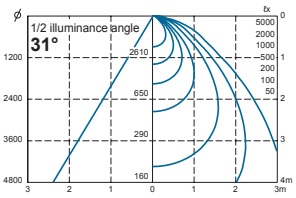
Continuous dimmable type (5 to 100%)

EDL127000DL/SA9
(100 to 242V, 50/60Hz)

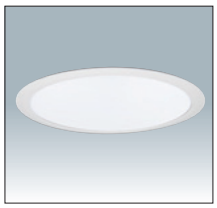
Rated luminous flux (luminaire luminous flux)	Power Consumption
5,040ℓm	127W to 124W
Luminous Efficacy	**LED Module Life**
39.7ℓm/W to 40.6ℓm/W	50,000hours
Light Color	**Color Rendering Index (Ra)**
Equivalent to 2,900K (Warm white)	90

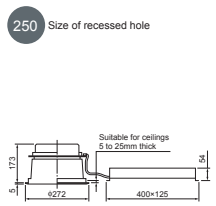
Specifications
Body: Diecast aluminum
Frame: Steel plate
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 4.8kg

* Non heat insulating construction.



Class 700 (Equivalent to 100W compact metal halide lamp)*2





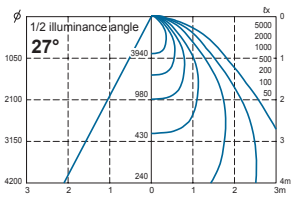
Standard

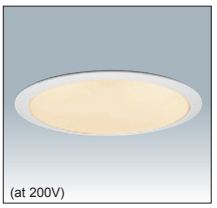
EDL89000N/SA9
(100 to 242V, 50/60Hz)

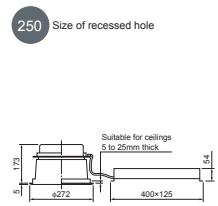
Rated luminous flux (luminaire luminous flux)	Power Consumption
6,940ℓm	89W to 87W
Luminous Efficacy	**LED Module Life**
78.0ℓm/W to 79.8ℓm/W	50,000hours
Light Color	**Color Rendering Index (Ra)**
Equivalent to 5,000K (Daylight)	70

Specifications
Body: Aluminum
Frame: Steel plate
Bottom cover: Acrylic (clear)
Finish color: White
Weight: 4.5kg

* Non heat insulating construction.







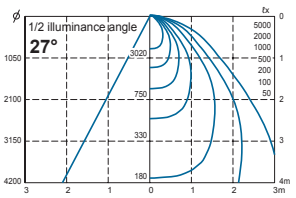
Standard

EDL89000L/SA9
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
5,320ℓm	89W to 87W
Luminous Efficacy	**LED Module Life**
59.8ℓm/W to 61.6ℓm/W	50,000hours
Light Color	**Color Rendering Index (Ra)**
Equivalent to 3,000K (Warm white)	70

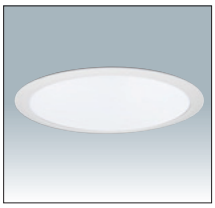
Specifications
Body: Aluminum
Frame: Steel plate
Bottom cover: Acrylic (clear)
Finish color: White
Weight: 4.5kg

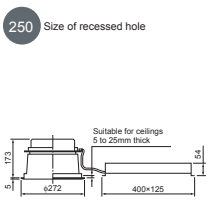
* Non heat insulating construction.



*1 Foregoing illuminance diagram indicates initial values (unit: ℓx).
*2 Indicates light sources whose brightness is equivalent when compared to the horizontal illuminance (initial) of high-output, daylight types.

Class 500 (Equivalent to 70W compact metal halide lamp)*2





Standard

EDL71000N/SA9

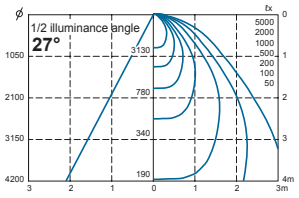
(100 to 242V, 50/60Hz)

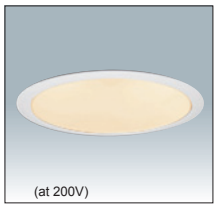
Rated luminous flux (luminaire luminous flux)	Power Consumption
5,460ℓm	71.0W to 69.0W
Luminous Efficacy	**LED Module Life**
76.9ℓm/W to 79.1ℓm/W	50,000hours
Light Color	**Color Rendering Index (Ra)**
Equivalent to 5,000K (Daylight)	70

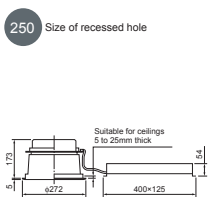
Specifications

Body: Aluminum
Frame: Steel plate
Bottom cover: Acrylic (clear)
Finish color: White
Weight: 4.5kg

* Non heat insulating construction.







(at 200V)

Standard

EDL71000L/SA9

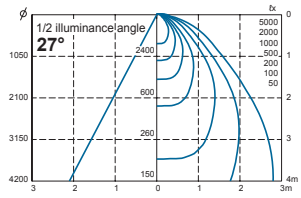
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
4,200ℓm	71.0W to 69.0W
Luminous Efficacy	**LED Module Life**
59.2ℓm/W to 60.9ℓm/W	50,000hours
Light Color	**Color Rendering Index (Ra)**
Equivalent to 3,000K (Warm white)	70

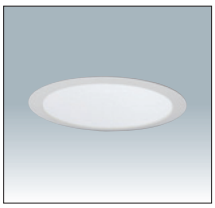
Specifications

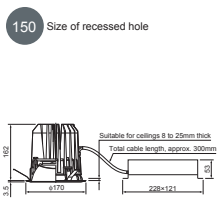
Body: Aluminum
Frame: Steel plate
Bottom cover: Acrylic (clear)
Finish color: White
Weight: 4.5kg

* Non heat insulating construction.



Class 500 (Equivalent to 70W compact metal halide lamp)*2





Continuous dimmable type (5 to 100%)

EDL69600DN/SA9

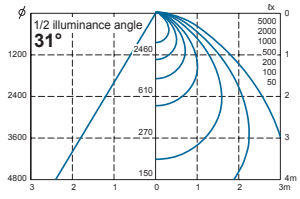
(100 to 242V, 50/60Hz)

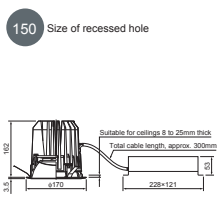
Rated luminous flux (luminaire luminous flux)	Power Consumption
5,200ℓm	69.6W to 66.7W
Luminous Efficacy	**LED Module Life**
74.7ℓm/W to 78.0ℓm/W	60,000hours
Light Color	**Color Rendering Index (Ra)**
Equivalent to 5,000K (Daylight)	70

Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 2.6kg

* Non heat insulating construction.





Continuous dimmable type (5 to 100%)

EDL69600DWW/SA9

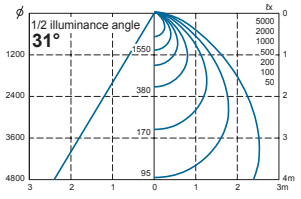
(100 to 242V, 50/60Hz)

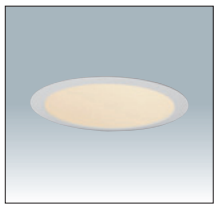
Rated luminous flux (luminaire luminous flux)	Power Consumption
3,290ℓm	69.6W to 66.7W
Luminous Efficacy	**LED Module Life**
47.3ℓm/W to 49.3ℓm/W	60,000hours
Light Color	**Color Rendering Index (Ra)**
Equivalent to 3,400K (White)	90

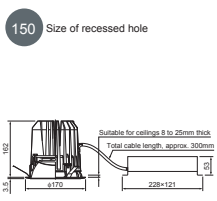
Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 2.6kg

* Non heat insulating construction.







Continuous dimmable type (5 to 100%)

EDL69600DL/SA9

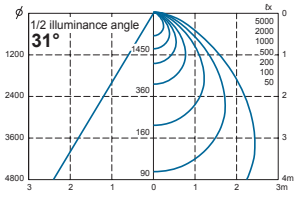
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
3,060ℓm	69.6W to 66.7W
Luminous Efficacy	**LED Module Life**
44.0ℓm/W to 45.9ℓm/W	60,000hours
Light Color	**Color Rendering Index (Ra)**
Equivalent to 2,900K (Warm white)	90

Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 2.6kg

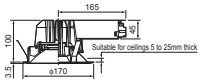
* Non heat insulating construction.



*1 Foregoing illuminance diagram indicates initial values (unit: ℓx).
*2 Indicates light sources whose brightness is equivalent when compared to the horizontal illuminance (initial) of high-output, daylight types.

Class 200 (Equivalent to FHT42W)*2

150 Size of recessed hole



Standard

EDL24202N/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL24702DN/SA9
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,910ℓm	[Standard] 24.2W to 23.8W [Dimmable] 24.7W to 24.3W

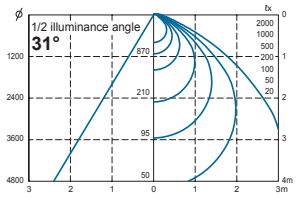
Luminous Efficacy
[Standard] 78.9ℓm/W to 80.3ℓm/W [Dimmable] 77.3ℓm/W to 78.6ℓm/W

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	70

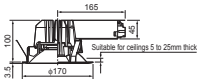
Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.



150 Size of recessed hole



Standard

EDL24202WW/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL24702DWW/SA9
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,210ℓm	[Standard] 24.2W to 23.8W [Dimmable] 24.7W to 24.3W

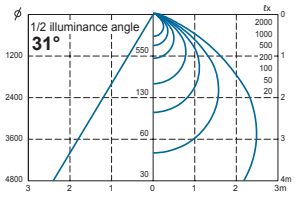
Luminous Efficacy
[Standard] 50.0ℓm/W to 50.8ℓm/W [Dimmable] 49.0ℓm/W to 49.8ℓm/W

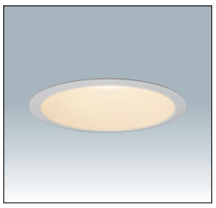
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,400K (White)	90

Specifications

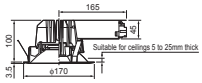
Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.





150 Size of recessed hole



Standard

EDL24202L/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL24702DL/SA9
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,130ℓm	[Standard] 24.2W to 23.8W [Dimmable] 24.7W to 24.3W

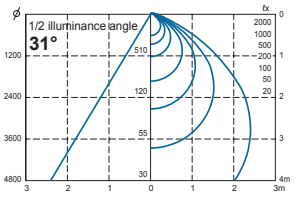
Luminous Efficacy
[Standard] 46.7ℓm/W to 47.5ℓm/W [Dimmable] 45.7ℓm/W to 46.5ℓm/W

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 2,900K (Warm white)	90

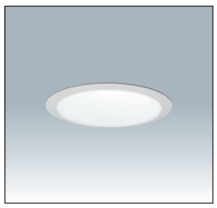
Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

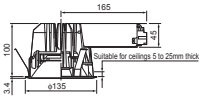
* Non heat insulating construction.



Class 200 (Equivalent to FHT42W)*2



125 Size of recessed hole



Standard

EDL24201N/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL24701DN/SA9
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,870ℓm	[Standard] 24.2W to 23.8W [Dimmable] 24.7W to 24.3W

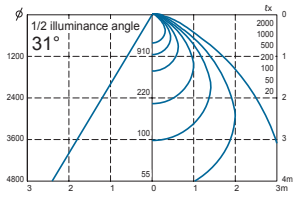
Luminous Efficacy
[Standard] 77.3ℓm/W to 78.6ℓm/W [Dimmable] 75.7ℓm/W to 77.0ℓm/W

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	70

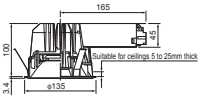
Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.



125 Size of recessed hole



Standard

EDL24201WW/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL24701DWW/SA9
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,190ℓm	[Standard] 24.2W to 23.8W [Dimmable] 24.7W to 24.3W

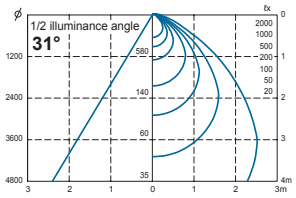
Luminous Efficacy
[Standard] 49.2ℓm/W to 50.0ℓm/W [Dimmable] 48.2ℓm/W to 49.0ℓm/W

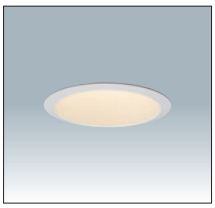
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,400K (White)	90

Specifications

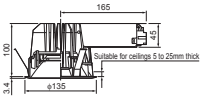
Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.





125 Size of recessed hole



Standard

EDL24201L/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL24701DL/SA9
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,110ℓm	[Standard] 24.2W to 23.8W [Dimmable] 24.7W to 24.3W

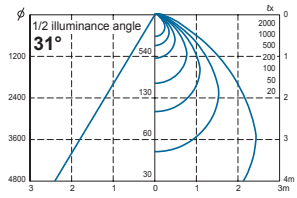
Luminous Efficacy
[Standard] 45.9ℓm/W to 46.6ℓm/W [Dimmable] 44.9ℓm/W to 45.7ℓm/W

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 2,900K (Warm white)	90

Specifications

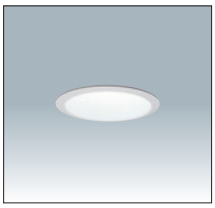
Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

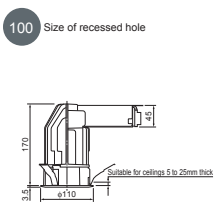
* Non heat insulating construction.



*1 Foregoing illuminance diagram indicates initial values (unit: ℓx).
*2 Indicates light sources whose brightness is equivalent when compared to the horizontal illuminance (initial) of high-output, daylight types.

Class 200 (Equivalent to FHT42W)*2





Standard

EDL24200N/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL24700DN/SA9
(100/200V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,800ℓm	[Standard] 24.2W to 23.8W [Dimmable] 24.7W to 24.3W

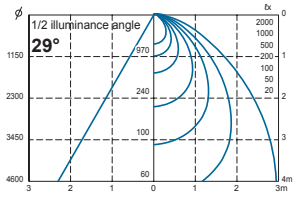
Luminous Efficacy
[Standard] 74.4ℓm/W to 75.6ℓm/W [Dimmable] 72.9ℓm/W to 74.1ℓm/W

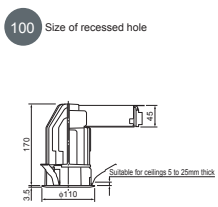
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	70

Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.





Standard

EDL24200WW/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL24700DWW/SA9
(100/200V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,150ℓm	[Standard] 24.2W to 23.8W [Dimmable] 24.7W to 24.3W

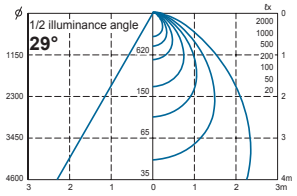
Luminous Efficacy
[Standard] 47.5ℓm/W to 48.3ℓm/W [Dimmable] 46.6ℓm/W to 47.3ℓm/W

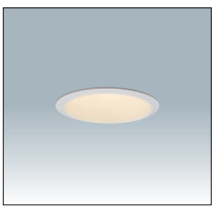
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,400K (White)	90

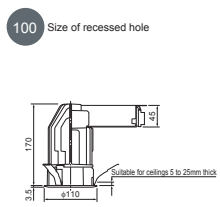
Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.







Standard

EDL24200L/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL24700DL/SA9
(100/200V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,070ℓm	[Standard] 24.2W to 23.8W [Dimmable] 24.7W to 24.3W

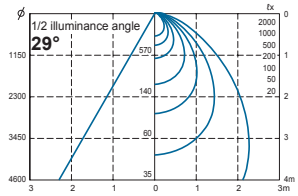
Luminous Efficacy
[Standard] 44.2ℓm/W to 45.0ℓm/W [Dimmable] 43.3ℓm/W to 44.0ℓm/W

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 2,900K (Warm white)	90

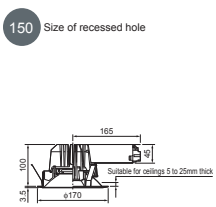
Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.



Class 150 (Equivalent to FHT32W)*2



Standard

EDL19602N/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL20002DN/SA9
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,570ℓm	[Standard] 19.6W to 19.2W [Dimmable] 20W to 20.3W

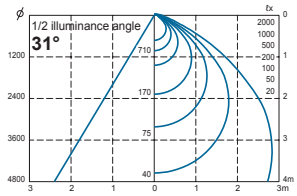
Luminous Efficacy
[Standard] 80.1ℓm/W to 81.8ℓm/W [Dimmable] 78.5ℓm/W to 77.3ℓm/W

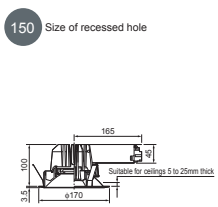
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	70

Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.





Standard

EDL19602WW/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL20002DWW/SA9
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
980ℓm	[Standard] 19.6W to 19.2W [Dimmable] 20W to 20.3W

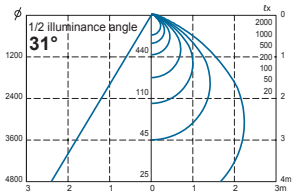
Luminous Efficacy
[Standard] 50.0ℓm/W to 51.0ℓm/W [Dimmable] 49.0ℓm/W to 48.3ℓm/W

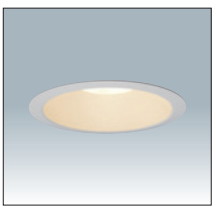
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,400K (White)	90

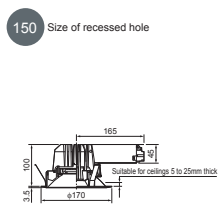
Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.







Standard

EDL19602L/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL20002DL/SA9
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
920ℓm	[Standard] 19.6W to 19.2W [Dimmable] 20W to 20.3W

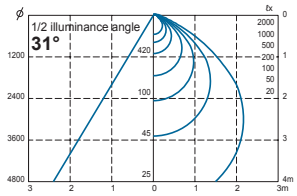
Luminous Efficacy
[Standard] 46.9ℓm/W to 47.9ℓm/W [Dimmable] 46.0ℓm/W to 45.3ℓm/W

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 2,900K (Warm white)	90

Specifications

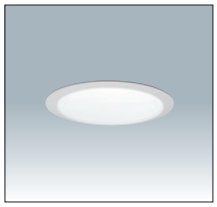
Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.

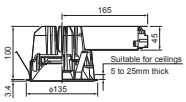


*1 Foregoing illuminance diagram indicates initial values (unit: ℓx).
*2 Indicates light sources whose brightness is equivalent when compared to the horizontal illuminance (initial) of high-output, daylight types.

Class 150 (Equivalent to FHT32W)*2



125 Size of recessed hole



Standard

EDL19601N/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL20001DN/SA9
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,540ℓm	[Standard] 19.6W to 19.2W [Dimmable] 20W to 20.3W

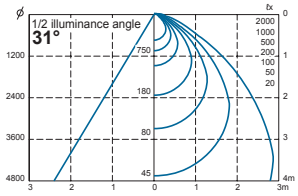
Luminous Efficacy
[Standard] 78.6ℓm/W to 80.2ℓm/W [Dimmable] 77.0ℓm/W to 75.9ℓm/W

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	70

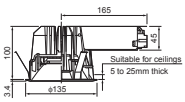
Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.



125 Size of recessed hole



Standard

EDL19601WW/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL20001DWW/SA9
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
965ℓm	[Standard] 19.6W to 19.2W [Dimmable] 20W to 20.3W

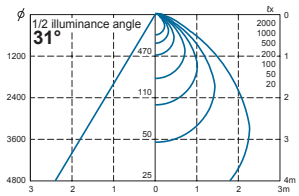
Luminous Efficacy
[Standard] 49.2ℓm/W to 50.3ℓm/W [Dimmable] 48.3ℓm/W to 47.5ℓm/W

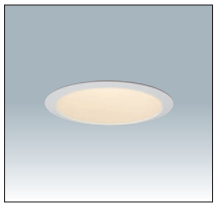
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,400K (White)	90

Specifications

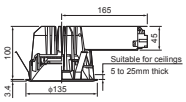
Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.





125 Size of recessed hole



Standard

EDL19601L/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL20001DL/SA9
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
910ℓm	[Standard] 19.6W to 19.2W [Dimmable] 20W to 20.3W

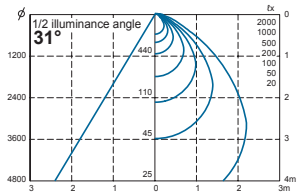
Luminous Efficacy
[Standard] 46.4ℓm/W to 47.4ℓm/W [Dimmable] 45.5ℓm/W to 44.8ℓm/W

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 2,900K (Warm white)	90

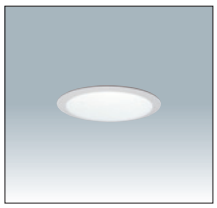
Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

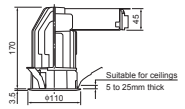
* Non heat insulating construction.



Class 150 (Equivalent to FHT32W)*2



100 Size of recessed hole



Standard

EDL19600N/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL20000DN/SA9
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,480ℓm	[Standard] 19.6W to 19.2W [Dimmable] 20W to 20.3W

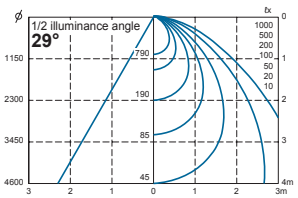
Luminous Efficacy
[Standard] 75.5ℓm/W to 77.8ℓm/W [Dimmable] 74.0ℓm/W to 72.9ℓm/W

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	70

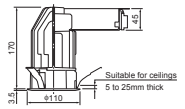
Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.



100 Size of recessed hole



Standard

EDL19600WW/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL20000DWW/SA9
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
930ℓm	[Standard] 19.6W to 19.2W [Dimmable] 20W to 20.3W

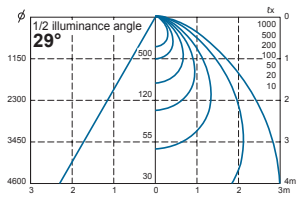
Luminous Efficacy
[Standard] 47.4ℓm/W to 48.4ℓm/W [Dimmable] 46.5ℓm/W to 45.8ℓm/W

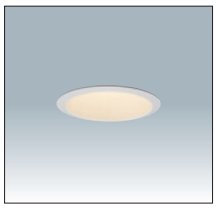
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,400K (White)	90

Specifications

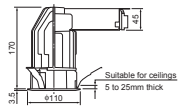
Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.





100 Size of recessed hole



Standard

EDL19600L/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL20000DL/SA9
(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
870ℓm	[Standard] 19.6W to 19.2W [Dimmable] 20W to 20.3W

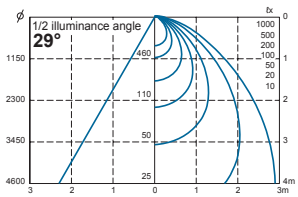
Luminous Efficacy
[Standard] 44.4ℓm/W to 45.3ℓm/W [Dimmable] 43.5ℓm/W to 42.9ℓm/W

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 2,900K (Warm white)	90

Specifications

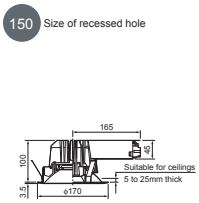
Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.



*1 Foregoing illuminance diagram indicates initial values (unit: ℓx).
*2 Indicates light sources whose brightness is equivalent when compared to the horizontal illuminance (initial) of high-output, daylight types.

Class 100 (Equivalent to FHT24W or 100W incandescent)



Standard

EDL13302N/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL13802DN/SA9
(100 to 242V, 50/60Hz)

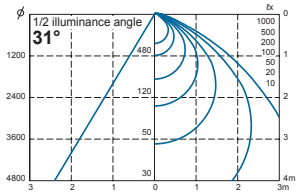
Rated luminous flux (luminaire luminous flux)	Power Consumption
1,060ℓm	[Standard] 13.3W to 13.5W [Dimmable] 13.8W to 14.3W

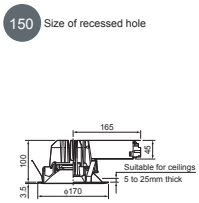
Luminous Efficacy
[Standard] 79.7ℓm/W to 78.5ℓm/W [Dimmable] 76.8ℓm/W to 74.1ℓm/W

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	70

Specifications
Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.





Standard

EDL13302WW/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL13802DWW/SA9
(100 to 242V, 50/60Hz)

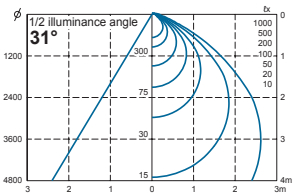
Rated luminous flux (luminaire luminous flux)	Power Consumption
670ℓm	[Standard] 13.3W to 13.5W [Dimmable] 13.8W to 14.3W

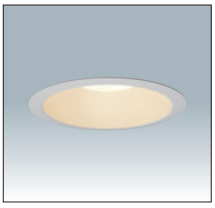
Luminous Efficacy
[Standard] 50.4ℓm/W to 49.6ℓm/W [Dimmable] 48.6ℓm/W to 46.9ℓm/W

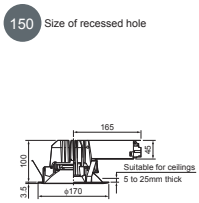
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,400K (White)	90

Specifications
Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.







Standard

EDL13302L/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL13802DL/SA9
(100 to 242V, 50/60Hz)

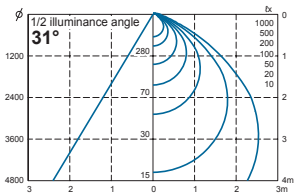
Rated luminous flux (luminaire luminous flux)	Power Consumption
630ℓm	[Standard] 13.3W to 13.5W [Dimmable] 13.8W to 14.3W

Luminous Efficacy
[Standard] 47.4ℓm/W to 46.7ℓm/W [Dimmable] 45.7ℓm/W to 44.1ℓm/W

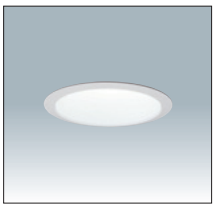
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 2,900K (Warm white)	90

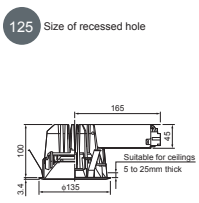
Specifications
Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.



Class 100 (Equivalent to FHT24W or 100W incandescent)





Standard

EDL13301N/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL13801DN/SA9
(100 to 242V, 50/60Hz)

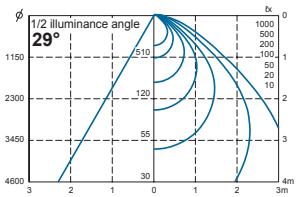
Rated luminous flux (luminaire luminous flux)	Power Consumption
1,040ℓm	[Standard] 13.3W to 13.5W [Dimmable] 13.8W to 14.3W

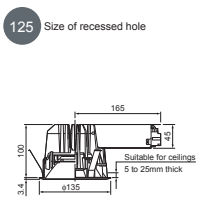
Luminous Efficacy
[Standard] 78.2ℓm/W to 77.0ℓm/W [Dimmable] 75.4ℓm/W to 72.7ℓm/W

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	70

Specifications
Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.





Standard

EDL13301WW/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL13801DWW/SA9
(100 to 242V, 50/60Hz)

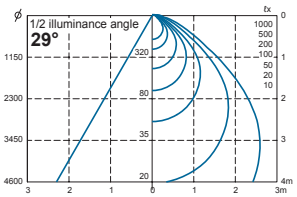
Rated luminous flux (luminaire luminous flux)	Power Consumption
655ℓm	[Standard] 13.3W to 13.5W [Dimmable] 13.8W to 14.3W

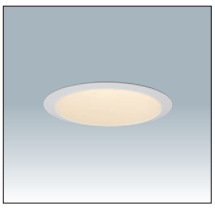
Luminous Efficacy
[Standard] 49.2ℓm/W to 48.5ℓm/W [Dimmable] 47.5ℓm/W to 45.9ℓm/W

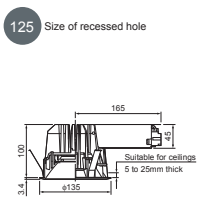
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,400K (White)	90

Specifications
Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.







Standard

EDL13301L/SA9
(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL13801DL/SA9
(100 to 242V, 50/60Hz)

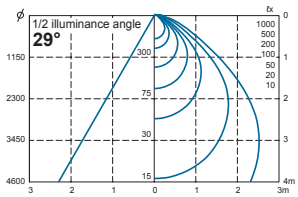
Rated luminous flux (luminaire luminous flux)	Power Consumption
620ℓm	[Standard] 13.3W to 13.5W [Dimmable] 13.8W to 14.3W

Luminous Efficacy
[Standard] 46.6ℓm/W to 45.9ℓm/W [Dimmable] 44.9ℓm/W to 43.4ℓm/W

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 2,900K (Warm white)	90

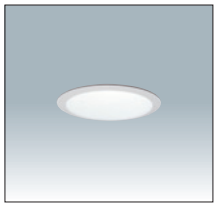
Specifications
Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

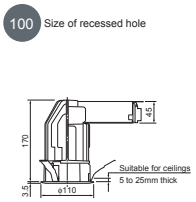
* Non heat insulating construction.



*1 Foregoing illuminance diagram indicates initial values (unit: ℓx).
*2 Indicates light sources whose brightness is equivalent when compared to the horizontal illuminance (initial) of high-output, daylight types.

Class 100 (Equivalent to FHT24W or 100W incandescent)*2





Standard

EDL13300N/SA9

(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL13800DN/SA9

(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,000ℓm	[Standard] 13.3W to 13.5W [Dimmable] 13.8W to 14.3W

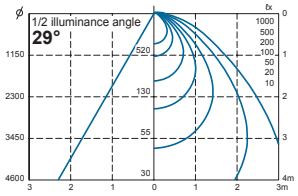
Luminous Efficacy
[Standard] 75.2ℓm/W to 74.1ℓm/W [Dimmable] 72.5ℓm/W to 69.9ℓm/W

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Daylight)	70

Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.



Standard

EDL13300WW/SA9

(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL13800DWW/SA9

(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
630ℓm	[Standard] 13.3W to 13.5W [Dimmable] 13.8W to 14.3W

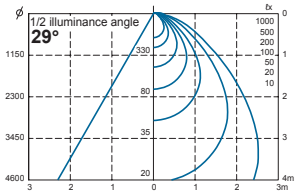
Luminous Efficacy
[Standard] 47.4ℓm/W to 46.7ℓm/W [Dimmable] 45.7ℓm/W to 44.1ℓm/W

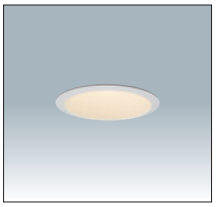
LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 3,400K (White)	90

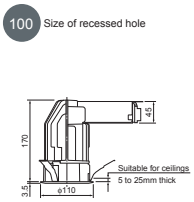
Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.







Standard

EDL13300L/SA9

(100 to 242V, 50/60Hz)

Continuous dimmable type (5 to 100%)

EDL13800DL/SA9

(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
590ℓm	[Standard] 13.3W to 13.5W [Dimmable] 13.8W to 14.3W

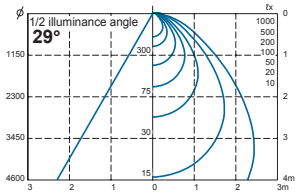
Luminous Efficacy
[Standard] 44.4ℓm/W to 43.7ℓm/W [Dimmable] 42.8ℓm/W to 41.2ℓm/W

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 2,900K (Warm white)	90

Specifications

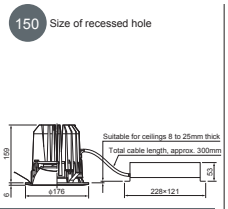
Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.



*1 Foregoing illuminance diagram indicates initial values (unit: ℓx).
*2 Indicates light sources whose brightness is equivalent when compared to the horizontal illuminance (initial) of high-output, daylight types.

Class 500 (Equivalent to 70W compact metal halide lamp)*2



Weather-proof | Continuous dimmable type (5 to 100%)

EDL69610DN/SA9

(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
5,200ℓm	69.6W to 66.7W

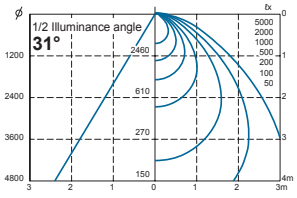
Luminous Efficacy	LED Module Life
74.7ℓm/W to 78.0ℓm/W	60,000hours

Light Color	Color Rendering Index (Ra)
Equivalent to 5,000K (Daylight)	70

Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 2.6kg

* Non heat insulating construction.
* Do not use in very humid locations, such as bathrooms.



Weather-proof | Continuous dimmable type (5 to 100%)

EDL69610DWW/SA9

(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
3,290ℓm	69.6W to 66.7W

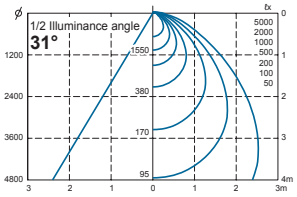
Luminous Efficacy	LED Module Life
47.3ℓm/W to 49.3ℓm/W	60,000hours

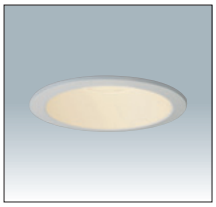
Light Color	Color Rendering Index (Ra)
Equivalent to 3,400K (White)	90

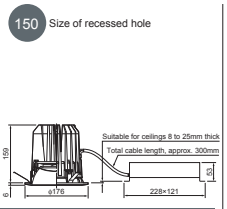
Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 2.6kg

* Non heat insulating construction.
* Do not use in very humid locations, such as bathrooms.







Weather-proof | Continuous dimmable type (5 to 100%)

EDL69610DL/SA9

(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
3,060ℓm	69.6W to 66.7W

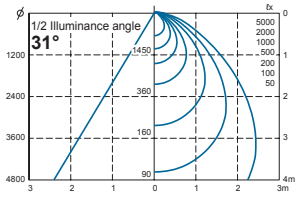
Luminous Efficacy	LED Module Life
44.0ℓm/W to 45.9ℓm/W	60,000hours

Light Color	Color Rendering Index (Ra)
Equivalent to 2,900K (Warm white)	90

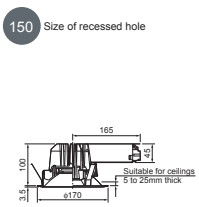
Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 2.6kg

* Non heat insulating construction.
* Do not use in very humid locations, such as bathrooms.



Class 200 (Equivalent to FHT42W)*2



Weather-proof

EDL24210N/SA9

(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,910ℓm	24.2W to 23.8W

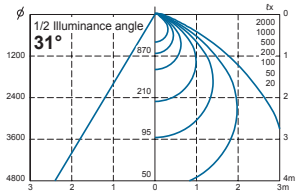
Luminous Efficacy	LED Module Life
78.9ℓm/W to 80.3ℓm/W	60,000hours

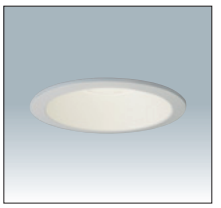
Light Color	Color Rendering Index (Ra)
Equivalent to 5,000K (Daylight)	70

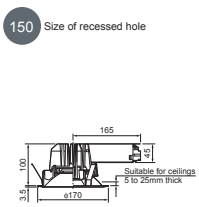
Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.
* Do not use in very humid locations, such as bathrooms.







Weather-proof

EDL24210WW/SA9

(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,210ℓm	24.2W to 23.8W

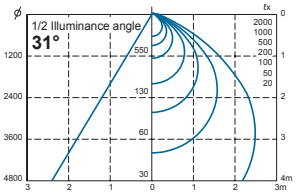
Luminous Efficacy	LED Module Life
50.0ℓm/W to 50.8ℓm/W	60,000hours

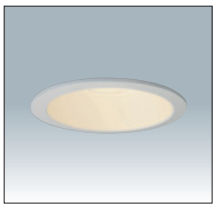
Light Color	Color Rendering Index (Ra)
Equivalent to 3,400K (White)	90

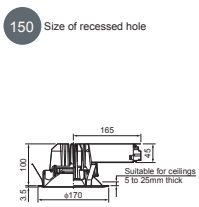
Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.
* Do not use in very humid locations, such as bathrooms.







Weather-proof

EDL24210L/SA9

(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,130ℓm	24.2W to 23.8W

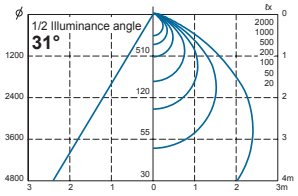
Luminous Efficacy	LED Module Life
46.7ℓm/W to 47.5ℓm/W	60,000hours

Light Color	Color Rendering Index (Ra)
Equivalent to 2,900K (Warm white)	90

Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

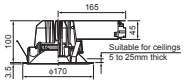
* Non heat insulating construction.
* Do not use in very humid locations, such as bathrooms.



*1 Foregoing illuminance diagram indicates initial values (unit: ℓx).
*2 Indicates light sources whose brightness is equivalent when compared to the horizontal illuminance (initial) of high-output, daylight types.

Class 150 (Equivalent to FHT32W)*2

150 Size of recessed hole



Weather-proof

EDL19610N/SA9

(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,570ℓm	19.6W to 19.2W

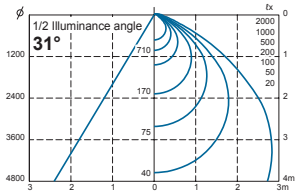
Luminous Efficacy	LED Module Life
80.1ℓm/W to 81.8ℓm/W	60,000hours

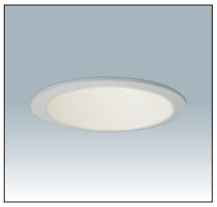
Light Color	Color Rendering Index (Ra)
Equivalent to 5,000K (Daylight)	70

Specifications

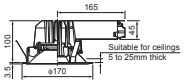
Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.
* Do not use in very humid locations, such as bathrooms.





150 Size of recessed hole



Weather-proof

EDL19610WW/SA9

(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
980ℓm	19.6W to 19.2W

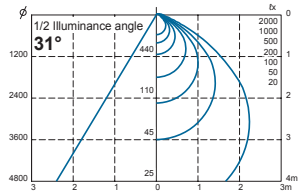
Luminous Efficacy	LED Module Life
50.5ℓm/W to 51.0ℓm/W	60,000hours

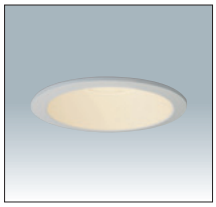
Light Color	Color Rendering Index (Ra)
Equivalent to 3,400K (White)	90

Specifications

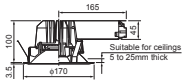
Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.
* Do not use in very humid locations, such as bathrooms.





150 Size of recessed hole



Weather-proof

EDL19610L/SA9

(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
920ℓm	19.6W to 19.2W

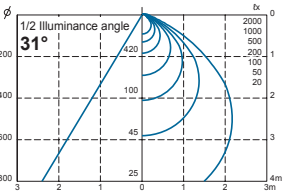
Luminous Efficacy	LED Module Life
46.9ℓm/W to 47.9ℓm/W	60,000hours

Light Color	Color Rendering Index (Ra)
Equivalent to 2,900K (Warm white)	90

Specifications

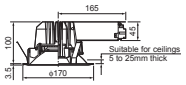
Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.
* Do not use in very humid locations, such as bathrooms.



Class 100 (Equivalent to FHT24W or 100W incandescent)*2

150 Size of recessed hole



Weather-proof

EDL13310N/SA9

(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,060ℓm	13.5W to 13.3W

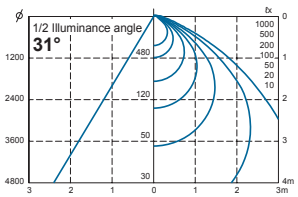
Luminous Efficacy	LED Module Life
78.5ℓm/W to 79.7ℓm/W	60,000hours

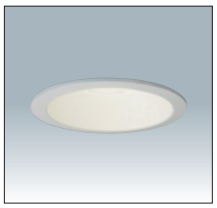
Light Color	Color Rendering Index (Ra)
Equivalent to 5,000K (Daylight)	70

Specifications

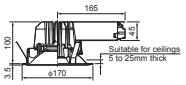
Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.
* Do not use in very humid locations, such as bathrooms.





150 Size of recessed hole



Weather-proof

EDL13310WW/SA9

(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
670ℓm	13.5W to 13.3W

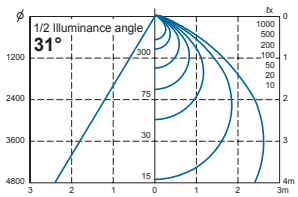
Luminous Efficacy	LED Module Life
49.6ℓm/W to 50.4ℓm/W	60,000hours

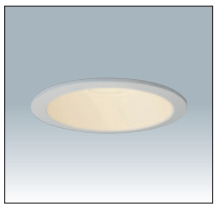
Light Color	Color Rendering Index (Ra)
Equivalent to 3,400K (White)	90

Specifications

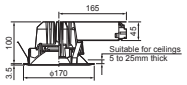
Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.
* Do not use in very humid locations, such as bathrooms.





150 Size of recessed hole



Weather-proof

EDL13310L/SA9

(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
670ℓm	13.5W to 13.3W

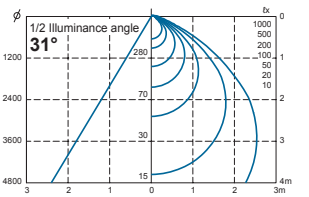
Luminous Efficacy	LED Module Life
49.6ℓm/W to 50.4ℓm/W	60,000hours

Light Color	Color Rendering Index (Ra)
Equivalent to 2,900K (Warm white)	90

Specifications

Body: Diecast aluminum
Frame: Plastic
Bottom cover: Acrylic (diffuse)
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.
* Do not use in very humid locations, such as bathrooms.



*1 Foregoing illuminance diagram indicates initial values (unit: ℓx).
*2 Indicates light sources whose brightness is equivalent when compared to the horizontal illuminance (initial) of high-output, daylight types.

LEDiOC

LED Universal Downlights

Class 300 (Equivalent to 70W compact metal halide lamp)

Class 100 (Equivalent to 75W halogen)

Extensive variety

A wide variety, from the equivalent of a 70W compact metal halide lamp to that of a 50W halogen lamp.

A three light-color lineup

In addition to refreshing daylight and warm white bulbs, the lineup includes a natural white light in the white type.

Light color

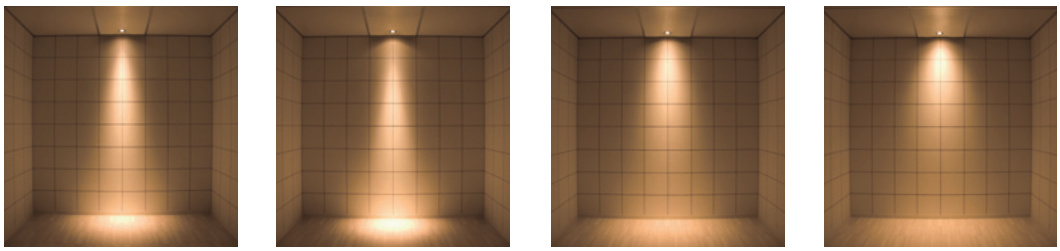
Equivalent to 5,000K (Daylight) **Equivalent to 3,500K (White)** **Equivalent to 3,000K (Warm white)**

A lineup with 4 types of light distribution

The lineup consists of 4 types of light distribution at 10°,15°, 20° and 30°, designed to be used in various conditions, such as for different ceiling heights and ways to show products.
(Classes 300/200 offer 2 light distributions, at 20°/30°)

Light distribution Class 100/75

1/2 beam angle 10° **1/2 beam angle 15°** **1/2 beam angle 20°** **1/2 beam angle 30°**



Long Life

LED modules have a long service life of 60,000hours (maximum length). This substantially cuts maintenance costs.

Dimmable lineup

Our lineup of dimmable lights generates even more energy savings
(Class 200/300 are signal controlled; class 75/100 are phase controlled)

■ Comparison when replacing a conventional light source (HID/halogen lamp) with LED universal downlights.

Comparison per light <Class 300>

	LC46085 (MT70CE-W/EU10) (CE0.7ESH-1/2.4-L8)		EDU4700DN/M (ESP-T0004/SA9)
Luminaire luminous flux	3,930ℓm	About 0.79 times	3,110ℓm
Power Consumption	81W	About 42% decrease	47W
Luminous Efficacy	48.5ℓm/W	About 1.4 times	66.2ℓm/W
Lifetime	15,000Hrs	About 2.7 times	40,000Hrs

Comparison per light <Class 100>

	DWD17032 (JR12V45WUV/MK5EZ/HA2)		EDU14600DL (EPS-T0002/SA1) (EPL-X0003)
Luminaire luminous flux	650ℓm	About the same	660ℓm
Power Consumption	45W	About 67.6% decrease	14.6W
Luminous Efficacy	14.4ℓm/W	About 3.1 times	45.2ℓm/W
Lifetime	5,000Hrs	About 8 times	40,000Hrs

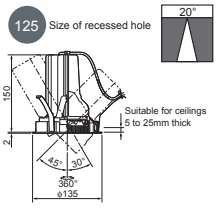
Comparison per light <Class 200>

	LC46085 (MT35CE-W/EU10) (CE0.35ESH-1/2.4-L8)		EDU35700DN/M (EPS-T0003/SA9)
Luminaire luminous flux	2,000ℓm	About 1.2 times	2,440ℓm
Power Consumption	46W	About 22.4% decrease	35.7W
Luminous Efficacy	43.5ℓm/W	About 1.6 times	67.8ℓm/W
Lifetime	12,000Hrs	About 3.3 times	40,000Hrs

Comparison per light <Class 75>

	DWD17032 (JR12V30WUV/MK5EZ/HA2)		EDU10000DL (EPS-T0001/SA1) (EPL-X0003)
Luminaire luminous flux	400ℓm	About 0.96 times	385ℓm
Power Consumption	30W	About 66.7% decrease	10.0W
Luminous Efficacy	13.3ℓm/W	About 2.9 times	38.5ℓm/W
Lifetime	5,000Hrs	About 12 times	60,000Hrs

Class 300 (Equivalent to 70W compact metal halide lamp)*2



Continuous dimmable (signal controlled, 25 to 100%)

EDU47000DN/M
(100 to 242V, 50/60Hz)

Luminaire:EDU47000DN/M
Power supply unit: EPS-T0004/SA9

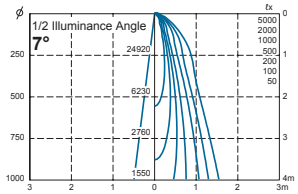
Rated luminous flux (luminaire luminous flux)	Power Consumption
3,110ℓm	47W

Luminous Efficacy	LED Module Life
66.2ℓm/W	40,000hours

Light Color	Color Rendering Index (Ra)
Equivalent to 5,000K (Daylight)	68

Specifications
Body: Diecast aluminum
Frame: Diecast aluminum
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.



Continuous dimmable (signal controlled, 25 to 100%)

EDU47000DN/W
(100 to 242V, 50/60Hz)

Luminaire:EDU47000DN/W
Power supply unit: EPS-T0004/SA9

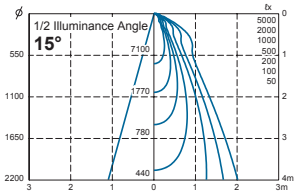
Rated luminous flux (luminaire luminous flux)	Power Consumption
3,060ℓm	47W

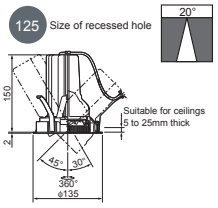
Luminous Efficacy	LED Module Life
65.1ℓm/W	40,000hours

Light Color	Color Rendering Index (Ra)
Equivalent to 5,000K (Daylight)	68

Specifications
Body: Diecast aluminum
Frame: Diecast aluminum
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.





Continuous dimmable (signal controlled, 25 to 100%)

EDU47000DWW/M
(100 to 242V, 50/60Hz)

Luminaire:EDU47000DWW/M
Power supply unit: EPS-T0004/SA9

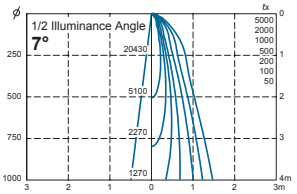
Rated luminous flux (luminaire luminous flux)	Power Consumption
2,550ℓm	47W

Luminous Efficacy	LED Module Life
54.3ℓm/W	40,000hours

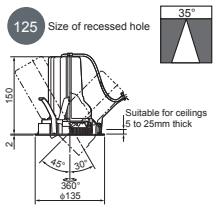
Light Color	Color Rendering Index (Ra)
Equivalent to 3,500K (White)	85

Specifications
Body: Diecast aluminum
Frame: Diecast aluminum
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.



Class 300 (Equivalent to 70W compact metal halide lamp)*2



Continuous dimmable (signal controlled, 25 to 100%)

EDU47000DWW/W
(100 to 242V, 50/60Hz)

Luminaire:EDU47000DWW/W
Power supply unit: EPS-T0004/SA9

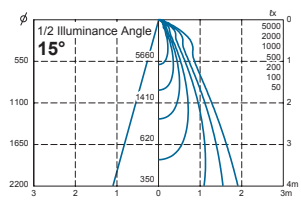
Rated luminous flux (luminaire luminous flux)	Power Consumption
2,440ℓm	47W

Luminous Efficacy	LED Module Life
51.9ℓm/W	40,000hours

Light Color	Color Rendering Index (Ra)
Equivalent to 3,500K (White)	85

Specifications
Body: Diecast aluminum
Frame: Diecast aluminum
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.



Continuous dimmable (signal controlled, 25 to 100%)

EDU47000DL/M
(100 to 242V, 50/60Hz)

Luminaire:EDU47000DL/M
Power supply unit: EPS-T0004/SA9

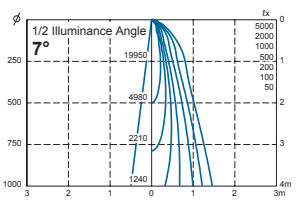
Rated luminous flux (luminaire luminous flux)	Power Consumption
2,490ℓm	47W

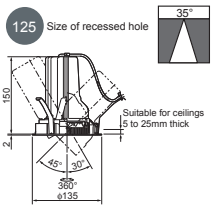
Luminous Efficacy	LED Module Life
53.0ℓm/W	40,000hours

Light Color	Color Rendering Index (Ra)
Equivalent to 3,000K (Warm white)	85

Specifications
Body: Diecast aluminum
Frame: Diecast aluminum
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.





Continuous dimmable (signal controlled, 25 to 100%)

EDU47000DL/W
(100 to 242V, 50/60Hz)

Luminaire:EDU47000DL/W
Power supply unit: EPS-T0004/SA9

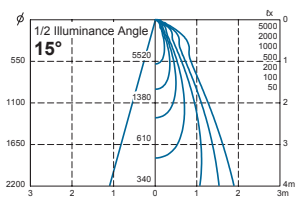
Rated luminous flux (luminaire luminous flux)	Power Consumption
2,380ℓm	47W

Luminous Efficacy	LED Module Life
50.6ℓm/W	40,000hours

Light Color	Color Rendering Index (Ra)
Equivalent to 3,000K (Warm white)	85

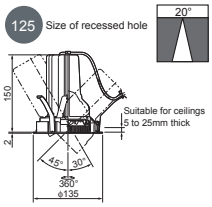
Specifications
Body: Diecast aluminum
Frame: Diecast aluminum
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.



*1 Foregoing illuminance diagram indicates initial values (unit: ℓx).
*2 Indicates light sources whose brightness is equivalent when compared to the horizontal illuminance (initial) of high-output, daylight types.

Class 200 (Equivalent to 35W compact metal halide lamp)*2



Continuous dimmable (signal controlled, 25 to 100%)

EDU35700DN/M

(100 to 242V, 50/60Hz)

Luminaire:EDU35700DN/M
Power supply unit: EPS-T0003/SA9

Rated luminous flux (luminaire luminous flux)	Power Consumption
2,440ℓm	35.7W

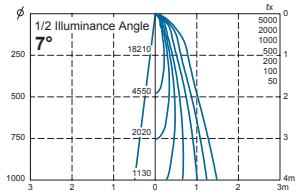
Luminous Efficacy	LED Module Life
67.8ℓm/W	40,000hours

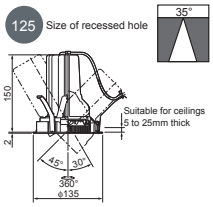
Light Color	Color Rendering Index (Ra)
Equivalent to 5,000K (Daylight)	68

Specifications

Body: Diecast aluminum
Frame: Diecast aluminum
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.





Continuous dimmable (signal controlled, 25 to 100%)

EDU35700DN/W

(100 to 242V, 50/60Hz)

Luminaire:EDU35700DN/W
Power supply unit: EPS-T0003/SA9

Rated luminous flux (luminaire luminous flux)	Power Consumption
2,400ℓm	35.7W

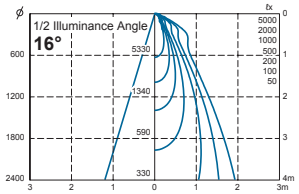
Luminous Efficacy	LED Module Life
66.7ℓm/W	40,000hours

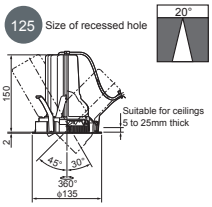
Light Color	Color Rendering Index (Ra)
Equivalent to 5,000K (Daylight)	68

Specifications

Body: Diecast aluminum
Frame: Diecast aluminum
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.





Continuous dimmable (signal controlled, 25 to 100%)

EDU35700DWW/M

(100 to 242V, 50/60Hz)

Luminaire:EDU35700DWW/M
Power supply unit: EPS-T0003/SA9

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,890ℓm	35.7W

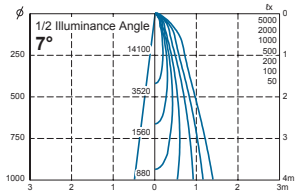
Luminous Efficacy	LED Module Life
52.5ℓm/W	40,000hours

Light Color	Color Rendering Index (Ra)
Equivalent to 3,500K (White)	85

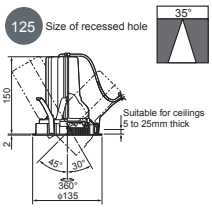
Specifications

Body: Diecast aluminum
Frame: Diecast aluminum
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.



Class 200 (Equivalent to 35W compact metal halide lamp)*2



Continuous dimmable (signal controlled, 25 to 100%)

EDU35700DWW/W

(100 to 242V, 50/60Hz)

Luminaire:EDU35700DWW/W
Power supply unit: EPS-T0003/SA9

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,810ℓm	35.7W

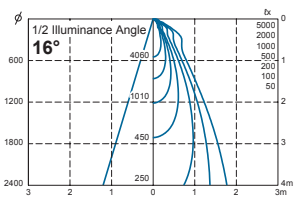
Luminous Efficacy	LED Module Life
50.3ℓm/W	40,000hours

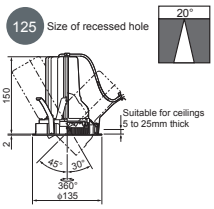
Light Color	Color Rendering Index (Ra)
Equivalent to 3,500K (White)	85

Specifications

Body: Diecast aluminum
Frame: Diecast aluminum
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.





Continuous dimmable (signal controlled, 25 to 100%)

EDU35700DL/M

(100 to 242V, 50/60Hz)

Luminaire:EDU35700DL/M
Power supply unit: EPS-T0003/SA9

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,870ℓm	35.7W

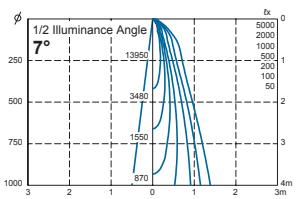
Luminous Efficacy	LED Module Life
51.9ℓm/W	40,000hours

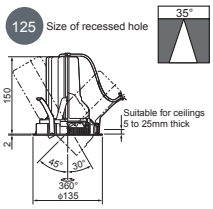
Light Color	Color Rendering Index (Ra)
Equivalent to 3,000K (Warm white)	85

Specifications

Body: Diecast aluminum
Frame: Diecast aluminum
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.





Continuous dimmable (signal controlled, 25 to 100%)

EDU35700DL/W

(100 to 242V, 50/60Hz)

Luminaire:EDU35700DL/W
Power supply unit: EPS-T0003/SA9

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,790ℓm	35.7W

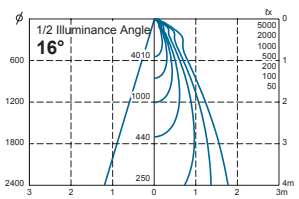
Luminous Efficacy	LED Module Life
49.7ℓm/W	40,000hours

Light Color	Color Rendering Index (Ra)
Equivalent to 3,000K (Warm white)	85

Specifications

Body: Diecast aluminum
Frame: Diecast aluminum
Finish color: White
Weight: 0.9kg

* Non heat insulating construction.



*1 Foregoing illuminance diagram indicates initial values (unit: ℓx).
*2 Indicates light sources whose brightness is equivalent when compared to the horizontal illuminance (initial) of high-output, daylight types.

Explosion Class: Exde II CT5
Protection Rating: IP65
Ambient operating temperature range:
-20°C to +40°C

Ceiling Mount

LEDioc

Complies with IEC Standards

Explosion-proof Luminaires/ Floodlights/Pit Lights

Approximately 90% more energy efficient than a 200W explosion-proof incandescent light.

- Contributes to reduced CO_2 emissions and achieves 1/10 energy consumption at 20W (at 200V) over an explosion-free incandescent bulb at 200W for lighting (EXIP201).
- Can be mounted 7 different ways to optimize installation for the usage.
- Can be used in a wide variety of operating temperatures: -20˚C to +40˚C.

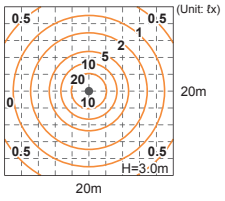
Complies with IEC Standards

Explosion-proof LED Luminaire

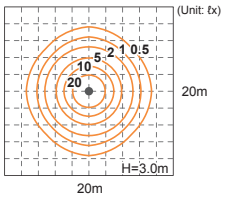
Comparison Example

Approximately 90% more energy efficient than a 200W explosion-proof incandescent light. Explosion-proof luminaires maximize the features of LEDs, such as long-life, high efficiency, mercury-free and ultraviolet-free.

Explosion-proof incandescent light 200W (EXIP201)



Explosion-proof LED Luminaire (EXIL121SA1/2.4-16)



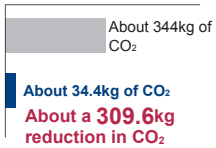
Explosion-Proof Incandescent Lamp Luminaire 200W (EXIP201)

Explosion-proof LED Luminaire (Ceiling mount)

Power consumption*1

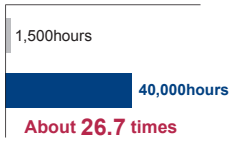
90% energy savings

Annual CO_2 Emissions*2



About a 309.6kg reduction in CO_2

Lifetime



About 26.7 times

*1 Power consumption based on input voltages, mercury lamp: 100V (standard HPF ballast), LED: 100V.
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

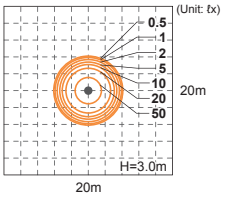
Complies with IEC Standards

Explosion-proof LED Floodlight

Comparison Example

Achieves a 93% energy savings over an explosion-proof incandescent lamp (EXL301:300W). Explosion-proof LED floodlights maximize the features of LEDs, such as long-life, high efficiency, mercury-free and ultraviolet-free.

Explosion-proof Incandescent Floodlight (EXL301)



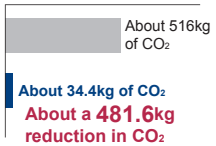
Explosion-proof Incandescent Floodlight (EXL301)

Explosion-proof LED Floodlight

Power consumption*1

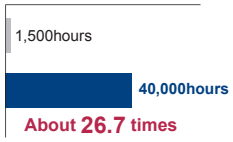
93% energy savings

Annual CO_2 Emissions*2



About a 481.6kg reduction in CO_2

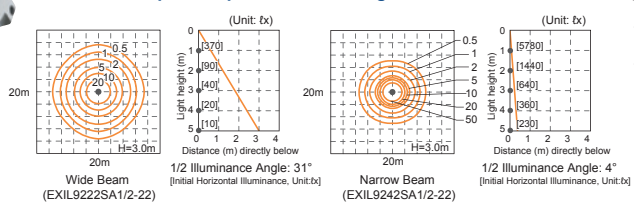
Lifetime



About 26.7 times

*1 Power consumption based on input voltages, mercury lamp: 100V (standard HPF ballast), LED: 100V.
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

Explosion-proof LED Floodlight



Wide Beam (EXIL9222SA1/2-22)
1/2 Illuminance Angle: 31°
[Initial Horizontal Illuminance, Unit:ℓx]

Narrow Beam (EXIL9242SA1/2-22)
1/2 Illuminance Angle: 4°
[Initial Horizontal Illuminance, Unit:ℓx]

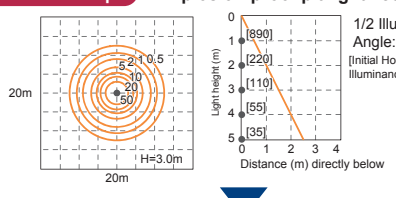
Complies with IEC Standards

Explosion-proof LED Pit Light

Comparison Example

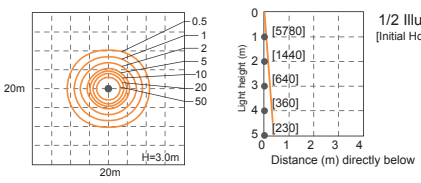
Achieves an 88% energy savings over an explosion-proof incandescent pit light (180W). Explosion-proof pit lights maximize the features of LEDs, such as long-life, high efficiency, mercury-free and ultraviolet-free.

Explosion-proof pit light 180W (EXRT200)



1/2 Illuminance Angle: 26°
[Initial Horizontal Illuminance, Unit:ℓx]

Explosion-proof LED Pit Light (Narrow Beam)

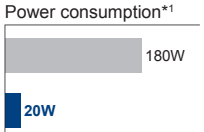


1/2 Illuminance Angle: 4°
[Initial Horizontal Illuminance, Unit:ℓx]

Explosion-Proof Pit Light 180W (EXRT200)

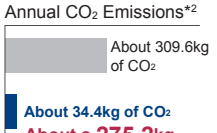
Explosion-proof LED Pit Light (Narrow Beam)

Power consumption*1



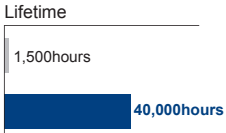
89% energy savings

Annual CO_2 Emissions*2



About a 275.2kg reduction in CO_2

Lifetime



About 26.7 times

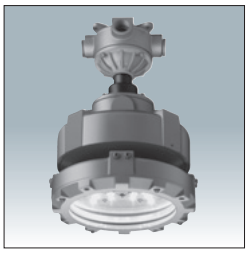
*1 Power consumption based on input voltages, mercury lamp: 100V (standard HPF ballast), LED: 100V.
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

* The horizontal plane illumination distribution diagram above indicates initial values (unit: ℓx).

Complies with IEC Standards

Explosion Class: Exde II CT5 (d:luminaire body, power supply unit, e:power supply unit upper box) Protection Rating: IP65

Explosion-proof LED luminaire



Ceiling Mount

EXIL121SA1/2.4-16 (22,28)

(100 to 240V, 50/60Hz)

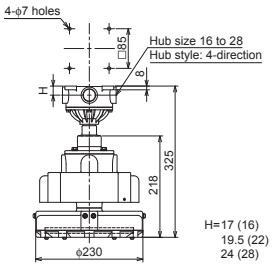
Rated luminous flux (luminaire luminous flux)	Power Consumption
980ℓm	20W (100 to 240V)

Luminous Efficacy	LED Module Life
49.0ℓm/W	40,000hours

Light Color	Color Rendering Index (Ra)
Equivalent to 6,500K (Cool daylight)	69

Specifications

Body: Aluminum alloy casting
Front glass: Tempered glass
Junction box: Cast
Finish color: Gray (Munsell N7)
Weight: 9.3kg



Bracket Mount

EXIL321SA1/2.4-16 (22,28)

(100 to 240V, 50/60Hz)

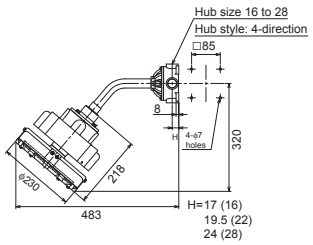
Rated luminous flux (luminaire luminous flux)	Power Consumption
980ℓm	20W (100 to 240V)

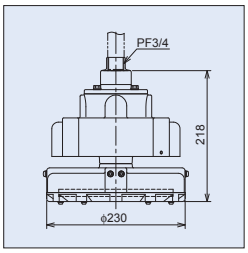
Luminous Efficacy	LED Module Life
49.0ℓm/W	40,000hours

Light Color	Color Rendering Index (Ra)
Equivalent to 6,500K (Cool daylight)	69

Specifications

Body: Aluminum alloy casting
Front glass: Tempered glass
Junction box: Cast
Finish color: Gray (Munsell N7)
Weight: 9.8kg





Stand (Ceiling Mount)

EXIL23SA1/2.4-0

(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
980ℓm	20W (100 to 240V)

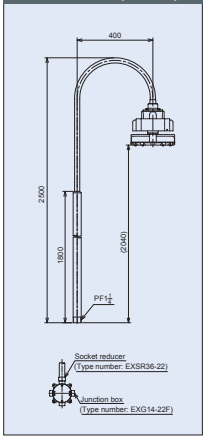
Luminous Efficacy	LED Module Life
49.0ℓm/W	40,000hours

Light Color	Color Rendering Index (Ra)
Equivalent to 6,500K (Cool daylight)	69

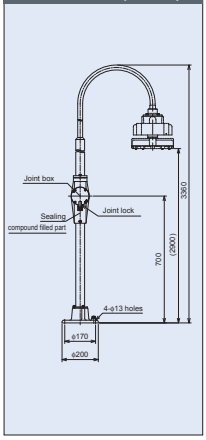
Specifications

Body: Aluminum alloy casting
Front glass: Tempered glass
Junction box: Aluminum alloy casting
Finish color: Gray (Munsell N7)
Weight: 7.8kg

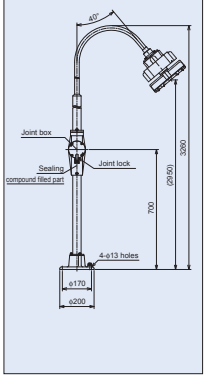
EXPC1/N7(Stand)



EXPC4/N7 (Stand)



EXPC5/N7 (Stand)



Pipe Pendant Mount

EXIL221SA1/2.4-16 (22,28)

(100 to 240V, 50/60Hz)

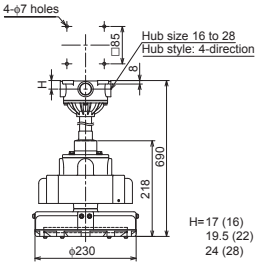
Rated luminous flux (luminaire luminous flux)	Power Consumption
980ℓm	20W (100 to 240V)

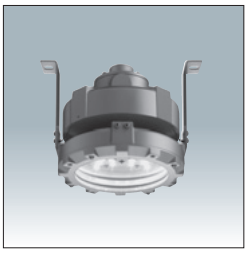
Luminous Efficacy	LED Module Life
49.0ℓm/W	40,000hours

Light Color	Color Rendering Index (Ra)
Equivalent to 6,500K (Cool daylight)	69

Specifications

Body: Aluminum alloy casting
Front glass: Tempered glass
Junction box: Cast
Finish color: Gray (Munsell N7)
Weight: 9.8kg





Special Ceiling Mount

EXIL9221SA1/2.4-22

(100 to 240V, 50/60Hz)

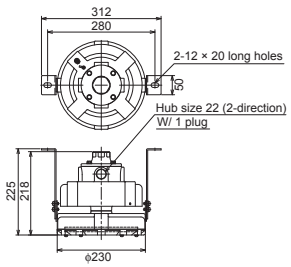
Rated luminous flux (luminaire luminous flux)	Power Consumption
980ℓm	20W (100 to 240V)

Luminous Efficacy	LED Module Life
49.0ℓm/W	40,000hours

Light Color	Color Rendering Index (Ra)
Equivalent to 6,500K (Cool daylight)	69

Specifications

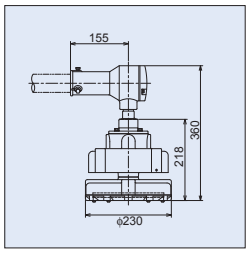
Body: Aluminum alloy casting
Front glass: Tempered glass
Junction box: Cast
Finish color: Gray (Munsell N7)
Weight: 9.0kg



Complies with IEC Standards

Explosion Class: Exde II CT5 (d:luminaire body, power supply unit, e:power supply unit upper box) Protection Rating: IP65

Explosion-proof LED luminaire



Stand (Pendant Mount)

EXIL21SA1/2.4-0

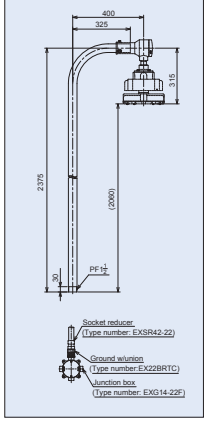
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
980ℓm	20W (100 to 240V)
Luminous Efficacy	**LED Module Life**
49.0ℓm/W	40,000hours
Light Color	**Color Rendering Index (Ra)**
Equivalent to 6,500K (Cool daylight)	69

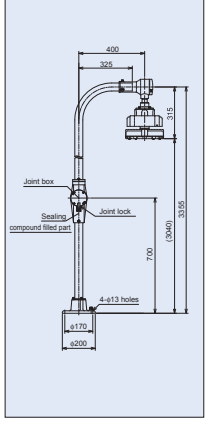
Specifications

Body: Aluminum alloy casting
Front glass: Tempered glass
Junction box: Aluminum alloy casting
Finish color: Gray (Munsell N7)
Weight: 9.3kg

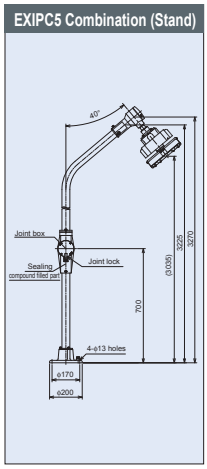
EXIPC1 Combination (Stand)



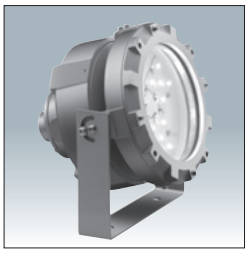
EXIPC4 Combination (Stand)



EXIPC5 Combination (Stand)



Explosion-proof LED Floodlight



Narrow Beam

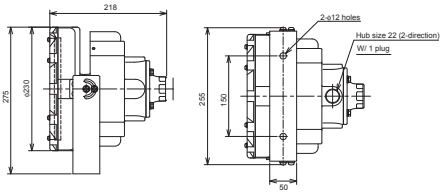
EXIL9242SA1/2.4-22

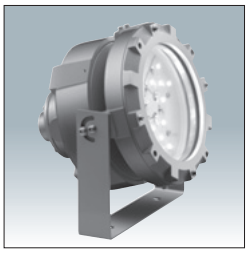
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,210ℓm	20W (100 to 240V)
Luminous Efficacy	**LED Module Life**
60.5ℓm/W	40,000hours
Light Color	**Color Rendering Index (Ra)**
Equivalent to 6,500K (Cool daylight)	69

Specifications

Body: Aluminum alloy casting
Front glass: Tempered glass
Arm: Stainless plate
Finish color: Gray (Munsell N7)
Weight: 9.0kg





Wide beam

EXIL9222SA1/2.4-22

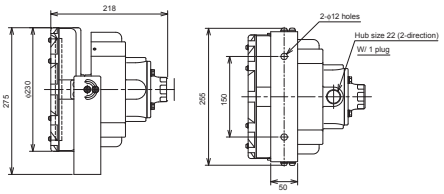
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
980ℓm	20W (100 to 240V)
Luminous Efficacy	**LED Module Life**
49.0ℓm/W	40,000hours
Light Color	**Color Rendering Index (Ra)**
Equivalent to 6,500K (Cool daylight)	69

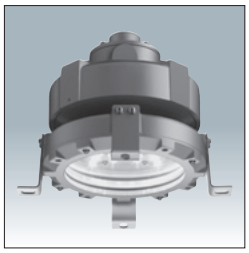
Specifications

Body: Aluminum alloy casting
Front glass: Tempered glass
Arm: Stainless plate
Finish color: Gray (Munsell N7)
Weight: 9.0kg

* Not requires special tools.



Explosion-proof LED Pit Light



Explosion-proof LED Pit Light

EXIL9243SA1/2.4-22

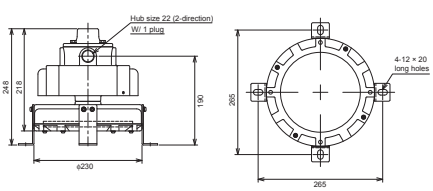
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,210ℓm	20W (100 to 240V)
Luminous Efficacy	**LED Module Life**
60.5ℓm/W	40,000hours
Light Color	**Color Rendering Index (Ra)**
Equivalent to 6,500K (Cool daylight)	69

Specifications

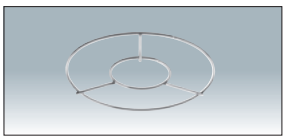
Body: Aluminum alloy casting
Front glass: Tempered glass
Mounting legs: Stainless plate
Finish color: Gray (Munsell N7)
Weight: 9.0kg

* Not requires special tools.



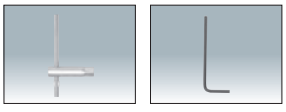
Options

Guard



EXILG20 (Stainless)
Finish: Electro-polished
Weight: 0.11kg

Special tools (sold separately)



TM5A
M5 BOX

LM5A
Other end 2.5mm
(Except WXIL9221)

(Note) Special tools are not included.
Purchase separately.

Ceiling Mount

Explosion-proof structure: ed3aG3
Protection rating: IP65
Ambient operating temperature range: -20°C to +40°C

Pipe Pendant Mount

Bracket Mount

Special Ceiling Mount

Angle Adjustable

Stand Type

LEDioc
Increased safety LED luminaire

An increased-safety, LED luminaire with a compact body that achieves the equivalent brightness of two 40W fluorescent lights.

Reduces energy consumption 42% when upgrading from two 40W fluorescent lights.
Saves installation work with its compact body and one-point mounting.

Bright as Two 40W Fluorescent Bulbs

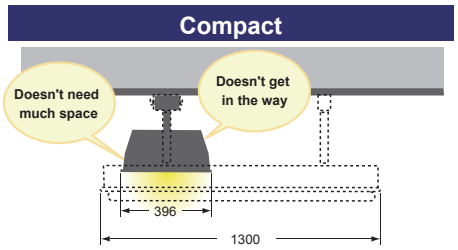
This LED increased safety luminaire can replace two 40W fluorescent lights, the most commonly used in explosion-proof plant settings. The light distribution control achieves a natural spread of light.

Contributes to Saving Energy from Fluorescent Lighting

Substituting an LED luminaire that consumes 47.8W (200V) for two 40W fluorescent lights (80W), results in approximately 40% of energy savings. That contributes to your plant's energy saving measures.

Compact Design

One merit of adopting LEDs as a light source is their effective and practical device shape. They save lighting installation space for explosion-proof plants, which tend to have a great deal of plumbing, wiring, etc.



Super compact at 400mm long — less than 1/3 of fluorescent fixture (1300mm).

Mounts in One Place, Saving Installation Work

Installation work is reduced by its compact design, which allows it to be mounted in one point.

Long Life Cuts Lighting Maintenance Costs

LED modules have a long life of 60,000hours. Their life is 6 times longer than fluorescent lights, reducing maintenance costs at explosion-proof plants, where maintenance is not easy.

The Instant-on Capability Typical of LED Lights Enables Flexible Light Control

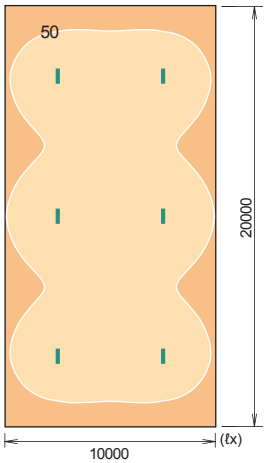
LED lights come on instantly and there is no need to wait for them to get bright. Instant-on and instant-off capability increases energy savings. And as they get bright right away, with no restart or standby time, it's possible to save energy by turning lights off for short period, such as during break times.

Limited Ultraviolet Light Means Limited Attraction of Insects. Less Infrared Reduces Air Conditioning Load.

LEDs emit very little ultraviolet light, keeping bugs attracted to ultraviolet from coming flying. They also generate very little infrared light and with such little infrared radiation from luminaires, the air conditioning load drops, saving electricity.

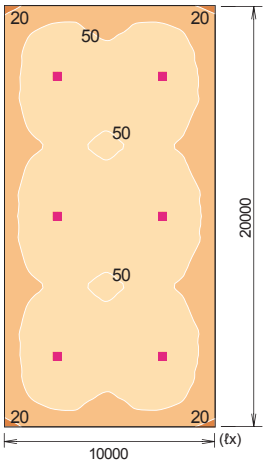
Comparison of Brightness <Horizontal Plane Light Distribution Diagram>

Increased safety fluorescent luminaire
(EYFL142525-0) (FLR40W×2)



Light height: 3.5m
Maintenance factor: 0.74
Average Illuminance 60ℓx

Increased safety LED luminaire
(EYL041SA1/2-0)



Light height: 3.5m
Maintenance factor: 0.72
Average Illuminance 60ℓx

Design conditions Reflection factor: Ceiling 30% / Walls 30% / Floor 10%

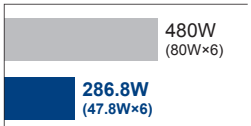
* The numbers on the curve indicate maintained horizontal illuminance (in ℓx)

Comparison Example

Increased safety fluorescent luminaire
(EYFL142525-0)
(FLR40W×2)

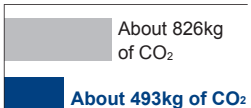
Increased safety LED luminaire
(EYL1041SA1/2.4-16 (22, 28)

Power consumption*1



40% energy savings

Annual CO_2 Emissions*2



About a 333kg reduction in CO_2

Lifetime

About 5 times

*1 Indicates power consumption when used with a 100V power supply.
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

Explosion Class: ed3aG3 (e: controller chamber, d: lamp chamber, junction box) Protection Rating: IP65

Ceiling Mount

EYL1041SA1/2.4-16 (22,28)

(100 to 240V, 50/60Hz)

Included contents
Body: EYL041SA1/2.4-0
Pendant mount: EYFHT10
Junction box: EYP14-16 (22,28)
Plug: EXP16 (22,28) B × Three

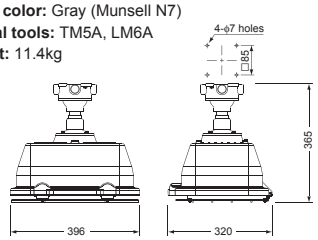
Rated luminous flux (luminaire luminous flux)	Power Consumption
3,710ℓm	48.6W(100V) 47.8W (200V/240V)

Luminous Efficacy
76.3ℓm/W (100V) 77.6ℓm/W (200V/240V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Cool daylight)	65

Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Guard: Stainless
Pipe: Steel pipe
Junction box: Cast
Finish color: Gray (Munsell N7)
Special tools: TM5A, LM6A
Weight: 11.4kg



Pipe Pendant Mount

EYL2041SA1/2.4-16 (22,28)

(100 to 240V, 50/60Hz)

Included contents
Body: EYL041SA1/2.4-0
Pendant mount: EYFHT20
Junction box: EYP14-16(22,28)
Plug: EXP16 (22,28) B × Three

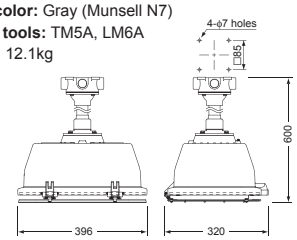
Rated luminous flux (luminaire luminous flux)	Power Consumption
3,710ℓm	48.6W(100V) 47.8W (200V/240V)

Luminous Efficacy
76.3ℓm/W (100V) 77.6ℓm/W (200V/240V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Cool daylight)	65

Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Guard: Stainless
Pipe: Steel pipe
Junction box: Cast
Finish color: Gray (Munsell N7)
Special tools: TM5A, LM6A
Weight: 12.1kg



Bracket Mount

EYL3041SA1/2.4-16 (22,28)

(100 to 240V, 50/60Hz)

Included contents
Body: EYL041SA1/2.4-0
Pendant mount: EYFHT30
Junction box: EYP14-16(22,28)
Plug: EXP16 (22,28) B × Three

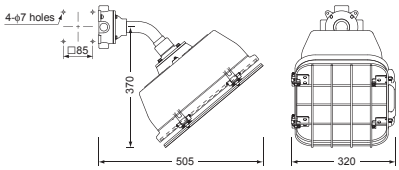
Rated luminous flux (luminaire luminous flux)	Power Consumption
3,710ℓm	48.6W(100V) 47.8W (200V/240V)

Luminous Efficacy
76.3ℓm/W (100V) 77.6ℓm/W (200V/240V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Cool daylight)	65

Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Guard: Stainless
Pipe: Steel pipe
Junction box: Cast
Finish color: Gray (Munsell N7)
Special tools: TM5A, LM6A
Weight: 11.7kg



Special Ceiling Mount

EYL9041SA1/2.4-16 (22)

(100 to 240V, 50/60Hz)

Included contents
Body: EYL9041SA1/2.4-0-16(22)
Pendant mount: EYFHT91

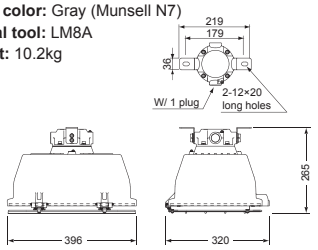
Rated luminous flux (luminaire luminous flux)	Power Consumption
3,710ℓm	48.6W(100V) 47.8W (200V/240V)

Luminous Efficacy
76.3ℓm/W (100V) 77.6ℓm/W (200V/240V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Cool daylight)	65

Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Guard: Stainless
Mounting legs: Stainless
Junction box: Cast aluminum
Finish color: Gray (Munsell N7)
Special tool: LM8A
Weight: 10.2kg



Angle Adjustable

EYL7041SA1/2.4-16 (22)

(100 to 240V, 50/60Hz)

Included contents
Body: EYL9041SA1/2.4-0-16(22)
Pendant mount: EYFHT92

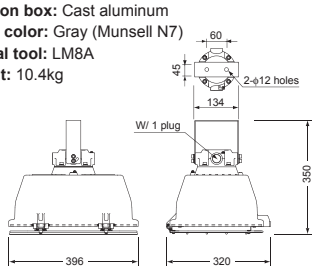
Rated luminous flux (luminaire luminous flux)	Power Consumption
3,710ℓm	48.6W(100V) 47.8W (200V/240V)

Luminous Efficacy
76.3ℓm/W (100V) 77.6ℓm/W (200V/240V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Cool daylight)	65

Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Guard: Stainless
Mounting legs: Stainless
Junction box: Cast aluminum
Finish color: Gray (Munsell N7)
Special tool: LM8A
Weight: 10.4kg



Stand Type

EYL8041SA1/2.4-0

(100 to 240V, 50/60Hz)

Reference Combination Example
Body: EYL8041SA1/2.4-0
Pendant mount: EYIBF50
Pole: EXIPC1(4,5)
* Separate wiring materials are necessary, depending on the type of pole.

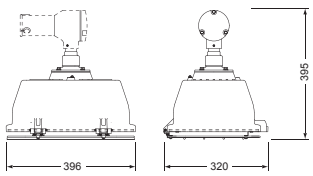
Rated luminous flux (luminaire luminous flux)	Power Consumption
3,710ℓm	48.6W(100V) 47.8W (200V/240V)

Luminous Efficacy
76.3ℓm/W (100V) 77.6ℓm/W (200V/240V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,000K (Cool daylight)	65

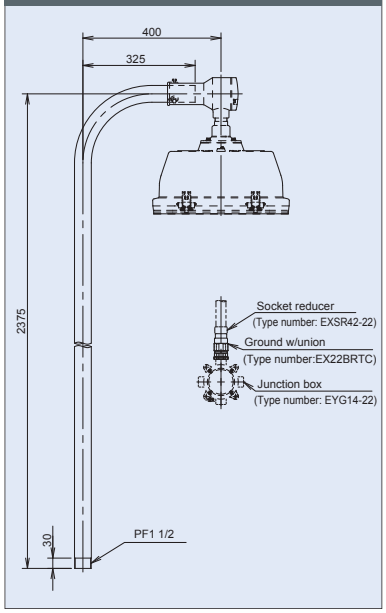
Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Guard: Stainless
Finish color: Gray (Munsell N7)
Special tools: TM5A, LM6A
Weight: 10.8kg



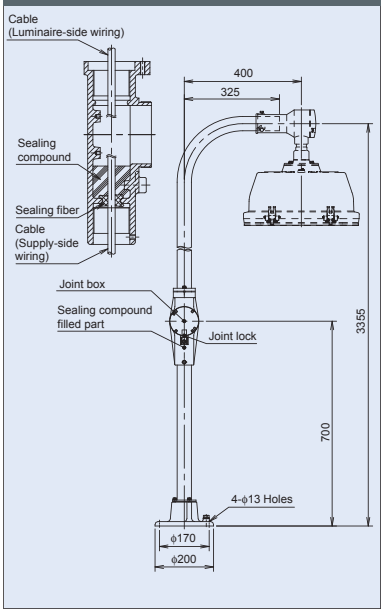
Stand and Pole Combination Reference

Pole: EXIPC1



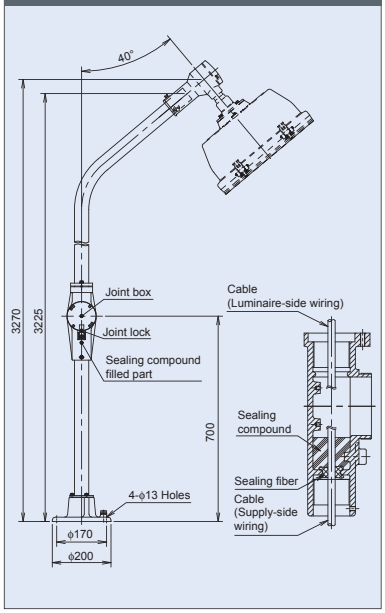
Reference Combination Example
Body: EYL8041SA1/2.4-0
Pole: EXIPC1
Socket reducer: EXSR42-22
Cable ground w/union: EX22BRTC
Junction box: EYG14-22

Pole: EXIPC4



Reference Combination Example
Body: EYL8041SA1/2.4-0
Pole: EXIPC4

Pole: EXIPC5



Reference Combination Example
Body: EYL8041SA1/2.4-0
Pole: EXIPC5

Special tools (sold separately)

TM5A	LM6A	LM8A
M5 BOX	Other end 3.0mm	Other end 5.0mm

LEDioc CEILING Low Temperature 43W/23W Types

A weather-proof LED ceiling light that can be used in the low temperatures (-40°C to +35°C) of cold/freezing storage.

The perfect compact LED luminaire for cold/freezing storage. Three mounting types and two brightnesses to choose from.

Operating Range -40°C to +35°C	Low-temp Trait High efficacy
Long Life 60,000hours*	Instant On Yes
Luminaire Height Thin design	Refrigeration Load Reduced

*23W type only
The life of the 43W type is 60,000hours below -10°C. Above that, it is 40,000hours.

Junction box mounted type

Pendant

Ceiling or Raceway Mount Type

Compatible with a Broad Range of Low-Temp Environments

With their wide operating range of -40°C to +35°C, LED luminaires can be used in new construction or retrofitting of frozen storage, as well as in standard temperature ranges.

Cold Storage Classes	Storage Temperature
Class C_3	-2°C to +10°C
Class C_2	-10°C to -2°C
Class C_1	-20°C to -10°C
Class F_1	-30°C to -20°C
Class F_2	-40°C to -30°C

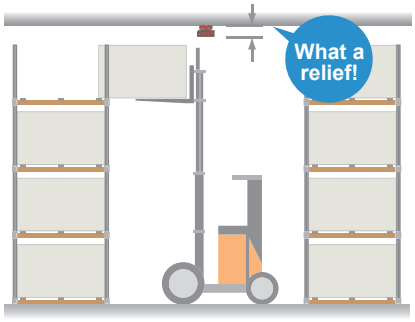
Long Life of 60,000hours*

LED modules have a long life of 60,000hours. They can greatly reduce the frequency of maintenance of illumination in the harsh operating environment of frozen storage.

* 23W type only
The life of the 43W type is 60,000hours below -10°C. Above that, it is 40,000hours.

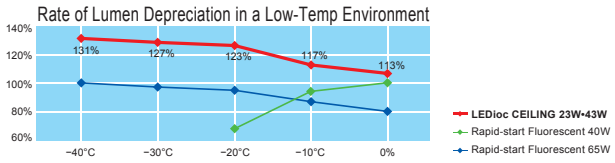
The Thin Design Doesn't Hinder Work in Storage Area

The thin design of the luminaire keeps it out of the way when moving goods in storage.



Very Efficient even at Low Temperatures

As the luminous flux of incandescent lights drops with the operating temperature, more lights are needed, consuming energy unnecessarily. The excellent low-temperature traits of LEDs contributes to reducing power consumption and maintaining high efficacy even at low temperatures.



Improves Energy Savings When Light Turned ON/OFF Frequently

HID and low-temperature incandescent lamps take time to start up once turned on, but LEDs can turn on instantly, allowing them to be turned off when workers are not in the storage area. Turning the power off frequently increases the energy saving effect.

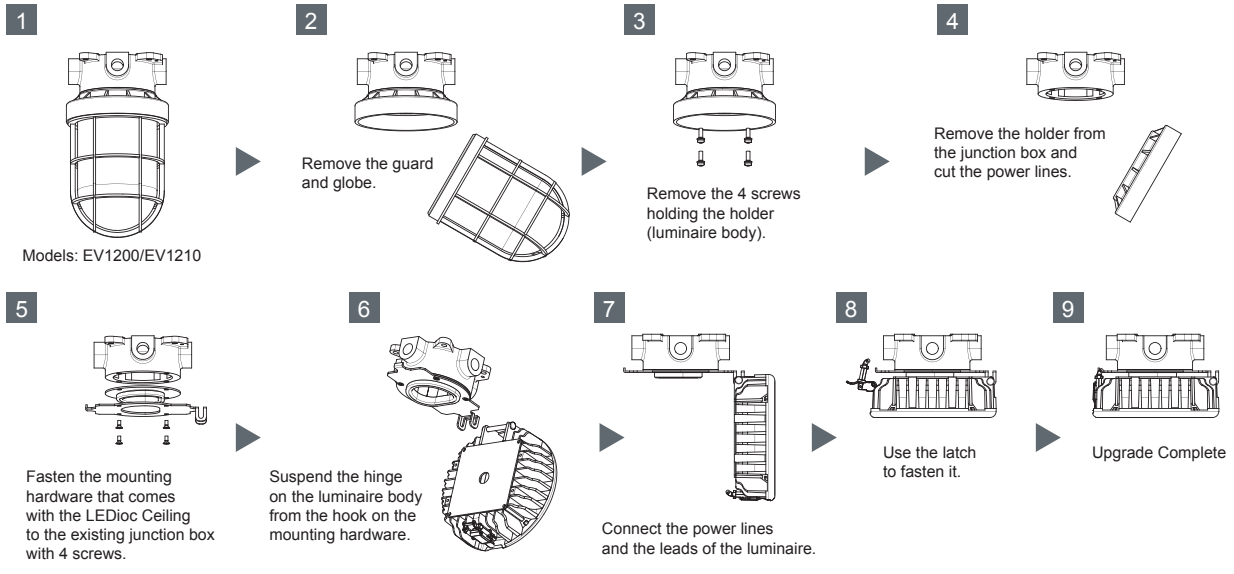
Curbing Heat from Luminaires Keeps Down Refrigeration Load

The surface temperature of LED luminaires is lower than that of low-temperature HID or incandescent lamps, reducing their impact on refrigeration load.

Installation-Efficient Design Saves Construction Work*

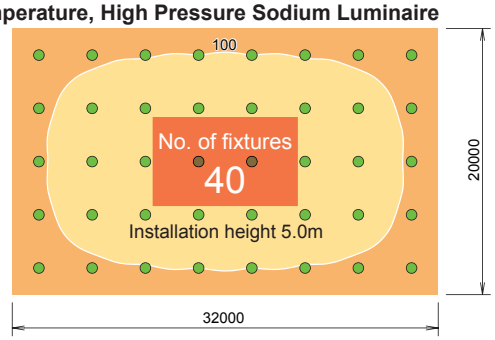
This type saves work when upgrading to LED luminaires, because when retrofitting a low-temperature incandescent luminaire (Iwasaki), the existing junction box can be left as is, so only the luminaire body has to be replaced.
*Limited to junction box mounted types

Procedure for Retrofitting from Iwasaki Low Temperature Incandescent Luminaires (Junction Box Mounted)

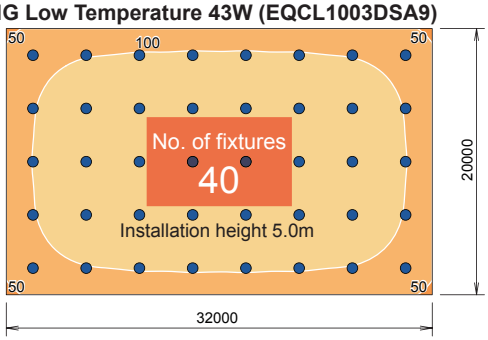


Comparison Example

70W Low Temperature, High Pressure Sodium Luminaire



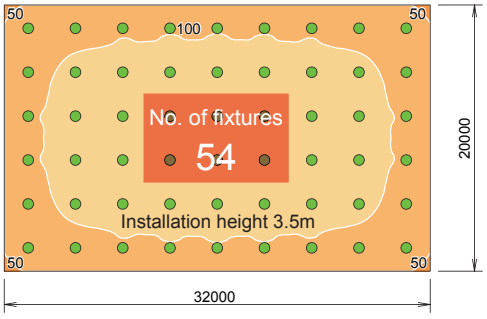
LEDioc CEILING Low Temperature 43W (EQCL1003DSA9)



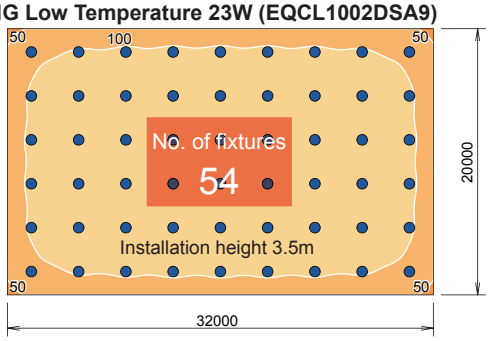
*1 Power consumption is calculated based on input wattage at rated voltage input.
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.
*3 Indicates product traits when used at -40°C ambient temperature.
* Maintenance factors, high pressure sodium: 0.83, LED: 0.63

	Average Illuminance	Power Consumption*1	Annual CO_2 Emissions*2	Lifetime*3
70W Low-temp, High Pressure Sodium Luminaire	103ℓx	3,400W (85W×40)	4,386kg of CO_2	9,000hours
LEDioc CEILING Low Temperature 43W type	107ℓx	1,720W (43W×40)	About 2,219kg of CO_2	60,000hours
	Same brightness	49% energy savings	About a 2,167kg reduction in CO_2	At least 6 times

Low Temperature Luminaire + 200W Incandescent Lamp (EV1210+BB220V200W)



LEDioc CEILING Low Temperature 23W (EQCL1002DSA9)



*1 Power consumption is calculated based on input wattage at rated voltage input.
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.
* Maintenance factors, incandescent bulb: 0.84, LED: 0.63

	Average Illuminance	Power Consumption*1	Annual CO_2 Emissions*2	Lifetime
Low Temperature Luminaire + 200W Incandescent Bulb	98ℓx	10,800W (200W×54)	13,932kg of CO_2	1,500hours
LEDioc CEILING Low Temperature 23W type	112ℓx	1,242W (23W×54)	About 1,602kg of CO_2	60,000hours
	Brightness: Same or better	90% energy savings	About a 12,330kg reduction in CO_2	40 times

43W type

Junction Box Mount

EQCL1003DSA9

(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
2,650ℓm	43W (100V) 42W (200V/242V)

Luminous Efficacy
61.6ℓm/W (100V) 63.1ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
40,000hours	Equivalent to 5,500K	70

In use at -40°C

Rated luminous flux (luminaire luminous flux)	Power Consumption
3,480ℓm	43W (100V) 42W (200V/242V)

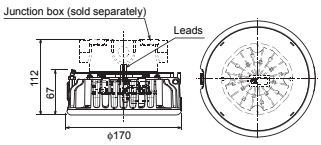
Luminous Efficacy
80.1ℓm/W (100V) 82.9ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,500K	70

Specifications

Body: Diecast aluminum
Globe: Polycarbonate
Finish color: White
Weight: 1.4kg

* Junction boxes (EYP14-16(22,28)) sold separately.
* Design life of LED modules is 40,000hours. However at low temperatures (10°C or less), the design life is 60,000hours.



Pendant

EQCL1003CSA9

(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
2,650ℓm	43W (100V) 42W (200V/242V)

Luminous Efficacy
61.6ℓm/W (100V) 63.1ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
40,000hours	Equivalent to 5,500K	70

In use at -40°C

Rated luminous flux (luminaire luminous flux)	Power Consumption
3,480ℓm	43W (100V) 42W (200V/242V)

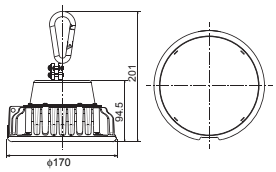
Luminous Efficacy
80.1ℓm/W (100V) 82.9ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,500K	70

Specifications

Body: Diecast aluminum
Globe: Polycarbonate
Finish color: White
Weight: 1.7kg

* Design life of LED modules is 40,000hours. However at low temperatures (10°C or less), the design life is 60,000hours.



Ceiling or Raceway Mount

EQCL1003RSA9

(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
2,650ℓm	43W (100V) 42W (200V/242V)

Luminous Efficacy
61.6ℓm/W (100V) 63.1ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
40,000hours	Equivalent to 5,500K	70

In use at -40°C

Rated luminous flux (luminaire luminous flux)	Power Consumption
3,480ℓm	43W (100V) 42W (200V/242V)

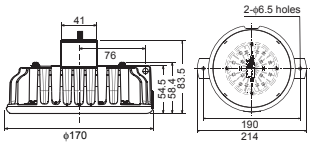
Luminous Efficacy
80.1ℓm/W (100V) 82.9ℓm/W (200V/242V)

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,500K	70

Specifications

Body: Diecast aluminum
Globe: Polycarbonate
Finish color: White
Weight: 1.4kg

* Design life of LED modules is 40,000hours. However at low temperatures (10°C or less), the design life is 60,000hours.



23W type

Junction Box Mount

EQCL1002DSA9

(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,880ℓm	23W

Luminous Efficacy
81.7ℓm/W

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,500K	70

In use at -40°C

Rated luminous flux (luminaire luminous flux)	Power Consumption
2,470ℓm	23W

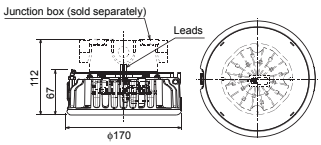
Luminous Efficacy
107.4ℓm/W

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,500K	70

Specifications

Body: Diecast aluminum
Globe: Polycarbonate
Finish color: White
Weight: 1.4kg

* Junction boxes (EYP14-16(22,28)) sold separately.



Pendant

EQCL1002CSA9

(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,880ℓm	23W

Luminous Efficacy
81.7ℓm/W

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,500K	70

In use at -40°C

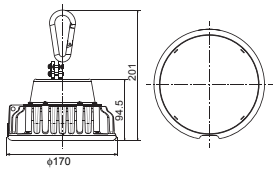
Rated luminous flux (luminaire luminous flux)	Power Consumption
2,470ℓm	23W

Luminous Efficacy
107.4ℓm/W

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,500K	70

Specifications

Body: Diecast aluminum
Globe: Polycarbonate
Finish color: White
Weight: 1.7kg



Ceiling or Raceway Mount

EQCL1002RSA9

(100 to 242V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
1,880ℓm	23W

Luminous Efficacy
81.7ℓm/W

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,500K	70

In use at -40°C

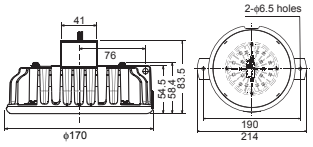
Rated luminous flux (luminaire luminous flux)	Power Consumption
2,470ℓm	23W

Luminous Efficacy
107.4ℓm/W

LED Module Life	Light Color	Color Rendering Index (Ra)
60,000hours	Equivalent to 5,500K	70

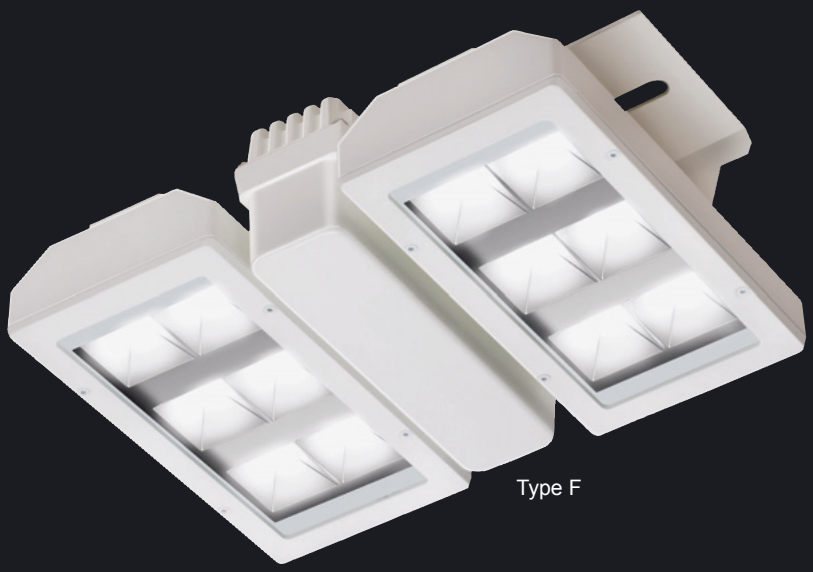
Specifications

Body: Diecast aluminum
Globe: Polycarbonate
Finish color: White
Weight: 1.4kg



LEDioc CEILING HB
Low Temperature

Our lineup of high-output and long life high-bay LED luminaires LEDioc CEILING HB series are a low-temperature type that can be installed in a wide range of facilities, from cold/frozen storage to general purpose warehousing.
They achieve a high-power brightness that surpasses C-class and F-class compatible low-temp HID luminaires (250W).



Type F

Type V

Broad Operating Temperature Range of -40°C to +35°C

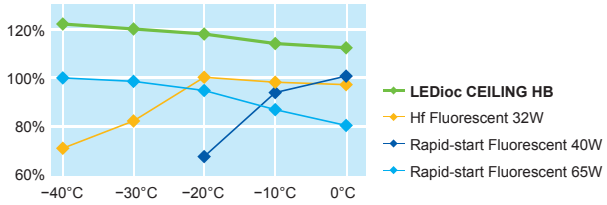
With their wide operating range of -40° C to +35° C, LED luminaires can be used in new construction or retrofitting of frozen storage, as well as in standard temperature ranges.

Cold Storage Classes	Storage Temperature
Class C_3	-2°C to +10°C
Class C_2	-10°C to -2°C
Class C_1	-20°C to -10°C
Class F_1	-30°C to -20°C
Class F_2	-40°C to -30°C

Very Efficient even at Low Temperatures

Low temperature fluorescent luminaires lose some of their luminous flux to atmospheric temperatures, so more lights have to be installed to obtain the required light, thus consuming electricity unnecessarily. With their exceptional low-temperature performance, LED light sources radiate light efficiently even in low-temp environments, thus providing highly efficient lighting.

Rate of Lumen Depreciationin a Low-Temp Environment



Can be Turned ON & OFF Frequently

Because low-temp HID devices take time to reach the required level of lighting once turned on, they consume energy unnecessarily as they tend to be left on regardless of whether workers are in a warehouse or not. LED lights source are capable of instant ON,OFF and restart, so they can be turned on just when work is being done, which contributes to conserving electricity.

High-power Suitable for High-Bay Cold/Frozen Storage

Our high-power LED luminaires has outstanding luminous flux at 13,800ℓm (Type V, wide beam), perfect for high ceilinged cold/frozen storage.

Reduces Refrigeration Load

Not only do they reduce energy consumption for lighting, but because the surface temperature of LED luminaires rises relatively little, the reduced refrigeration load also contributes to reducing the energy consumption of the refrigeration unit.

Long Design Life of 40,000hours

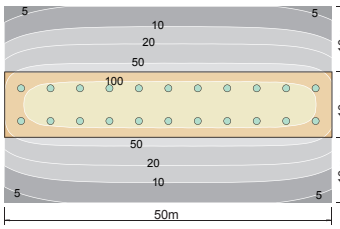
We've achieved a design life for our LEDs of 40,000hours. Because the working environment for maintenance in cold storage cannot readily be restored to standard temperatures, the reduced frequency of maintenance manifests its advantage even more than standard environments.
*Bulb and dimmable types can be special ordered.

Comparison Example

●Design Example: Warehouse Lighting

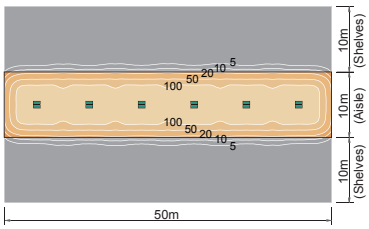
Metal Halide Lamp Low-Temp Luminaire
(HQS201B-2A(B))
Metal Halide Lamp 250W (MF250LE/BH)

LEDioc CEILING HB Low-Temp Type
(EQCL18713N/SA1/2.4)



Same brightness

Design conditions
Installation Height: 5.0m
Installed Quantity: 22
Maintenance Factor: 0.44



Design conditions
Installation Height: 5.0m
Installed Quantity: 6
Maintenance Factor: 0.63
*At -40°C setting inside frozen storage

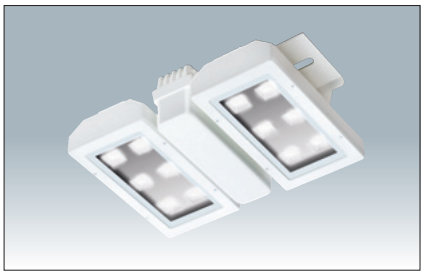
	Average Illuminance (In 50m × 10m range)	Power consumption*1	Annual CO_2 Emissions*2	Lifetime
Metal Halide Lamp Low-Temp Luminaire (HQS201B-2A(B)) **250W metal halide lamp** (MF250LE/BH)	100ℓx	5,786W (263W×22)	About 9,952kg of CO_2	9,000hours
LEDioc CEILING HB Low-Temp Type (EQCL18713N/SA1/2.4)	**113ℓx**	**1,080W** (180W×6)	**About 1,858kg of CO_2**	**40,000hours**
	Same brightness	**An energy saving of roughly 77%**	**About 8,094kg reduction of CO_2**	**About 4.4 times**

*1 Power consumption based on input voltages, for metal halide lamp: 200V (standard HPF ballast), LED lamp operating at 200V.
*2 CO_2 emission volume is calculated based on 0.43kg of CO_2 per kWh.

* The horizontal plane illumination distribution diagram above indicates initial values (unit: ℓx).

Low Temperature Type F (Range for class C & F -40°C to +35°C)

Narrow Beam



Weather-proof

EQCL18711N/SA1/2.4 (Daylight)

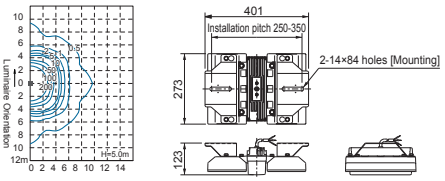
(Body: EQCL18711N/SA1/2.4-0+ bracket: AEHCL11)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
10,900ℓm (Daylight)	180W
Luminous Efficacy	**LED Module Life**
60.6ℓm/W (Daylight)	40,000hours
Light Color	**Color Rendering Index (Ra)**
Equivalent to 5,000K (Daylight)	68

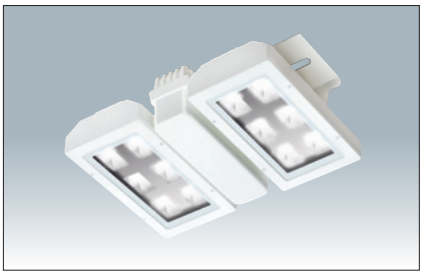
* Values above are typical under standard temperatures.

Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg



Medium Beam



Weather-proof

EQCL18712N/SA1/2.4 (Daylight)

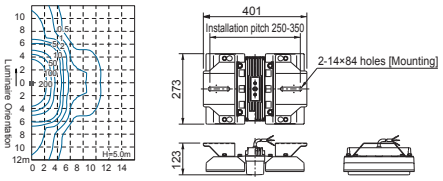
(Body: EQCL18712N/SA1/2.4-0+ bracket: AEHCL11)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
12,300ℓm (Daylight)	180W
Luminous Efficacy	**LED Module Life**
68.3ℓm/W (Daylight)	40,000hours
Light Color	**Color Rendering Index (Ra)**
Equivalent to 5,000K (Daylight)	68

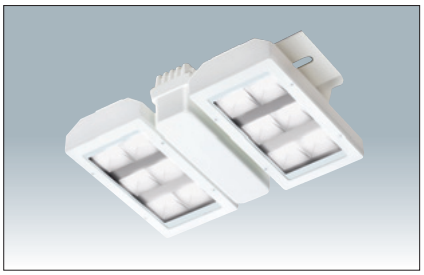
* Values above are typical under standard temperatures.

Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg



Wide Beam



Weather-proof

EQCL18713N/SA1/2.4 (Daylight)

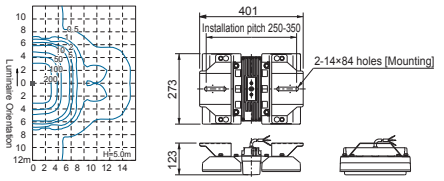
(Body: EQCL18713N/SA1/2.4-0+ bracket: AEHCL11)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
13,600ℓm (Daylight)	180W
Luminous Efficacy	**LED Module Life**
75.6ℓm/W (Daylight)	40,000hours
Light Color	**Color Rendering Index (Ra)**
Equivalent to 5,000K (Daylight)	68

* Values above are typical under standard temperatures.

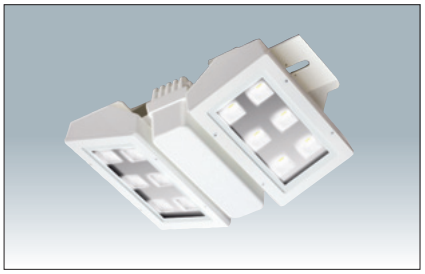
Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg



Low Temperature Type V (Range for grade C & F -40°C to +35°C)

Narrow Beam



Weather-proof

EQCL18721N/SA1/2.4 (Daylight)

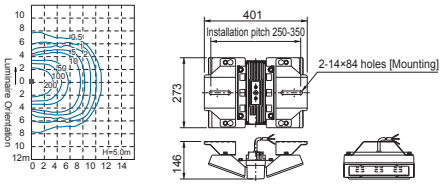
(Body: EQCL18721N/SA1/2.4-0+ bracket: AEHCL11)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
11,930ℓm (Daylight)	180W
Luminous Efficacy	**LED Module Life**
66.3ℓm/W (Daylight)	40,000hours
Light Color	**Color Rendering Index (Ra)**
Equivalent to 5,000K (Daylight)	68

* Values above are typical under standard temperatures.

Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg



Medium Beam

Weather-proof

EQCL18722N/SA1/2.4 (Daylight)

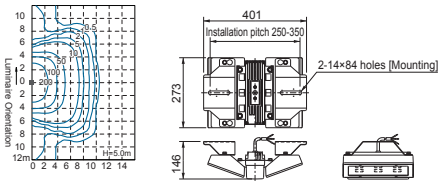
(Body: EQCL18722N/SA1/2.4-0+ bracket: AEHCL11)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
13,320ℓm (Daylight)	180W
Luminous Efficacy	**LED Module Life**
74.0ℓm/W (Daylight)	40,000hours
Light Color	**Color Rendering Index (Ra)**
Equivalent to 5,000K (Daylight)	68

* Values above are typical under standard temperatures.

Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg



Wide Beam

Weather-proof

EQCL18723N/SA1/2.4 (Daylight)

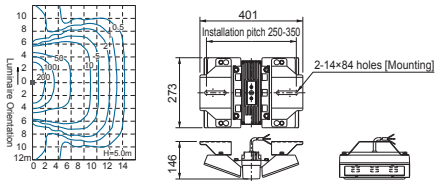
(Body: EQCL18723N/SA1/2.4-0+ bracket: AEHCL11)
(100 to 240V, 50/60Hz)

Rated luminous flux (luminaire luminous flux)	Power Consumption
13,800ℓm (Daylight)	180W
Luminous Efficacy	**LED Module Life**
76.7ℓm/W (Daylight)	40,000hours
Light Color	**Color Rendering Index (Ra)**
Equivalent to 5,000K (Daylight)	68

* Values above are typical under standard temperatures.

Specifications

Body: Diecast aluminum
Front glass: Tempered glass
Mounting plate: Stainless
Finish color: White
Weight: 10.7kg



* The horizontal plane illumination distribution diagram above indicates initial values (unit: ℓx) at -40°C.

Warnings on Using LEDiocs (LED luminaires)

Outdoor LED Luminaires

- Do not use luminaires under the following environmental conditions. Doing so may cause fire, electrical shock or injury if the luminaire falls.
  - Places where the ambient temperature exceeds 35°C
  - Very humid places (exceeding 85%) or where it may be immersed in water
  - Places subject to strong vibration and/or shock
  - Where subject to damage from salty air or places on the sea or coast where seawater laden spray comes in direct contact with the luminaire
  - Places that produce corrosive and/or combustible gas: very dusty locations
- Follow the directions in the installation Manual and install the luminaire securely. An improper installation may lead to fire, electrical shock and/or injury due to a falling luminaire.
- When a pole or the like is used in conjunction with the luminaire, be sure to use one of sufficient strength. If the pole is not strong enough, an injury may occur from the luminaire falling.
- Do not alter or modify the luminaire. Doing so may cause fire, electrical shock or injury if the luminaire falls.
- The luminaire gets hot when lit, so do not use it in a place where someone could easily touch it. Touching it may result in a burn.
- The luminaire gets hot when lit, so do not use close to combustible materials. Doing so may cause a fire.
- Never install in an orientation other than that specified. Doing so may result in fire, electrical shock and/or injury due to overheating, flooding or broken glass.
- Do not use luminaires that have not been treated for corrosion resistance in a corrosive environment or where corrosive gases are produced. An injury may result if the luminaire falls due to corrosion.
- Do not install in a place subject to a lot of vibration, such as a crane, unless the luminaire is the vibration-resistant type. Doing so may damage the luminaire itself and/or cause an injury if part(s) of the luminaire falls.
- Do not use as a portable luminaire.
- Do not bend the lead wires to an acute angle.
- LED Color Variation
  The color of LEDs vary more greatly than general-purpose light sources, such as incandescent and fluorescent lighting. For that reason, please bear in mind that the color tone of individual LEDs may differ.
- Luminous Flux and Illuminance Distribution
  The figures for luminous flux and illuminance distribution noted in the description of each luminaire are reference values, so consider them rough guides.

Eyebird/Solar Powered Lights

- If you have special applications for hybrid solar-powered or solar-powered luminaires, or if you wish to use them in unique environments or in regions subject to damage from salt air, please consult with us separately.
- Solar-powered lights use natural energy, so weather conditions may prevent them from lighting for as long as desired. (Please consult with us separately.)
- Shade from a branch of a tree or the like on the surface of the solar cell severely diminishes its recharging capacity.
- Recharging capacity is diminished when the surface of the solar cell is dirty. Clean it off once a year.
- Refer to the specifications for the service life of each device.

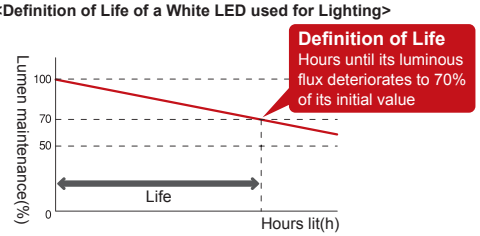
Indoor LED Luminaires

- Do not use luminaires under the following environmental conditions. Doing so may cause fire, electrical shock and/or the luminaire to fall.
  - Places outside, including exterior walls, etc. where rain water or water drops can get on them
  - Places where the ambient temperature exceeds 35°C
  - Places subject to strong vibration and/or shock
  - Very humid places (exceeding 85%) or where it may be immersed in water
  - Places that produce corrosive and/or combustible gas: very dusty locations
  - Places subject to strong winds: near stoves or heaters
- Follow the directions in the User's Manual and install the luminaire securely. An improper installation may lead to fire, electrical shock and/or injury due to a falling luminaire.
- Do not alter or modify the luminaire. Doing so may cause fire, electrical shock or injury if the luminaire falls.
- Do not allow readily flammable materials such as cloth or paper to get close to or cover the luminaire. Doing so may cause a fire.
- Always wear gloves while cleaning or performing maintenance on a luminaire. Failure to do so may result in injury.
- Luminaires must be installed in the correct orientation. Follow the installation Manual carefully for a proper installation. Failure to do so may cause fire, electrical shock or injury if the luminaire falls.
- Do not install in places where the ceiling material is made of a special material, such as wire screen, even with luminaires made for under-eave applications. Rain water may get on the device, causing fire or electrical shock.
- Do not use in locations subject to extreme temperature differences. Condensation inside the device may cause fire, electrical shock or result in injury due to the lamp breaking.

LED Life

Although LEDs do not have a filament that burns out like a traditional incandescent light bulb, its luminous flux does gradually decrease over time in use due to deterioration of the LED chip. The life of this LED is defined as the "number of hours at which its total luminous flux deteriorates to 70% of its initial total luminous flux, or when its light intensity is 70% of its initial intensity, when used as a light source for general lighting" as per technical data sheet 134 "White Luminaire Performance Requirements" of the Japan Luminaires Association. (The life of color LEDs is defined as when the lumen maintenance is at 50%.) The rated life of the white LEDs used in our LEDioc Series falls under this definition, and the life listed is the time when it reaches 70% of its initial total luminous flux (70% lumen maintenance). Please note that the hours of rated life are the design life of the LED and this life is not guaranteed. Also, in terms of the life of a luminaire, we recommend replacement at 8 to 10years, in the same way as products using a traditional light source.

<Definition of Life of a White LED used for Lighting>



Designed on the premise that life is the time at 70% lumen maintenance, when used in a general-purpose lighting device.

Solar LED Blocks and Tiles (Precautions for Construction)

- For installations of solar LED blocks or tiles in new or existing concrete or mortar, fill in the surrounding area with sealant*1.
  *1 Alcohol-based silicon sealant (for use with polycarbonate and acrylic)
- Do not fill in directly with concrete or mortar.
- When installing in fresh concrete or mortar, protect the sides and bottom by wrapping them with an anti-corrosive tape, (resistant to alkali) which is sold separately. This anti-corrosive tape is not necessary for installations to existing concrete or mortar.
- Tightly wrap the sides at the joints with the top and bottom covers.
- We recommend using a self-fusing type of anti-corrosion tape. Do not use denatured silicon.

[Floodlights]

- Do not use luminaires that have not been treated for corrosion resistance in a corrosive environment or where corrosive gases are produced. An injury may result if the luminaire falls due to corrosion.
- Do not use a general-purpose floodlight as a portable luminaire.
- Do not bend the lead wires to an acute angle.

Warnings on Using LEDiocs (LED luminaires)

[High-bay Luminaires]

- Do not use luminaires in the following environments/conditions. Doing so may cause fire, electrical shock or injury if the luminaire falls.
  - Places outside, including exterior walls, etc. where rain water or water drops can get on them
  - Places where the ambient temperature exceeds 35°C (places that exceed 40°C in normal ceiling mount lifting mechanism installations)
  - Places subject to strong vibration and/or shock
  - Very humid places (exceeding 85%) or where they may be immersed in water
  - Places that produce corrosive and/or combustible gas
  - Very dusty locations (except for dust-proof/corrosion resistant types)
  - Places subject to strong winds
- Install luminaires in locations that can support their weight. If materials are not strong enough, it may result in fire, electrical shock, or injury if a luminaire falls.

[Special Luminaires for Industrial Applications]

- Confirm the characteristics of the usage location and select the product that suits the environment. Using a product that is inappropriate for the environmental conditions may cause fire, burns, electrical shock and/or the product to fall. The kinds of environments that require care include the following.
  - Locations where the ambient temperature exceeds 40°C, as the ability to prevent explosion may be compromised.
  - In cold locations, use low-temperature luminaires and ballasts that can withstand use at low temperatures, as well as light sources that can start at them.
  - In locations where explosive atmosphere may be generated, use explosion-proof devices, in compliance with applicable laws and regulations. Never use general-purpose devices.
  - Use an airtight device for applications in dusty locations.
    Please note, if the dust may be explosive or combustible, conform with applicable laws and regulations and use a proper dust explosion-proof device. Apart from these situations, if you wish to use a product in a special location, please consult with us at our nearest place of business.
- Install luminaires securely in locations that can support their weight. Failure to do so may cause fire, electrical shock or injury if the luminaire falls.

[Downlights]

- Do not use luminaires in the following environments/conditions. Doing so may cause fire, electrical shock and/or parts to fall.
  - Places outside, including exterior walls, etc. where rain water or water drops can get on them
  - Places where the ambient temperature exceeds 35°C
  - Places subject to strong vibration and/or shock
  - Very humid places (exceeding 85%) or where they may be immersed in water
  - Places that produce corrosive and/or combustible gas
  - Very dusty locations
  - Places subject to strong winds
  - Near stoves or heaters
- The irradiation area of luminaires gets hot. The irradiation distance is limited. If used at a distance within the limit, a fire may result. Select the device to use after checking its irradiation distance.
- Do not allow readily flammable materials such as cloth or paper to get close to or cover the luminaire. Doing so may cause a fire.
- Always wear gloves while cleaning or performing maintenance on a luminaire. Failure to do so may result in injury.
- Luminaires must be installed in the correct orientation. Follow the installation Manual carefully for a proper installation. Failure to do so may cause fire, electrical shock or injury if the luminaire falls.
- Do not use for a long time around goods that are particularly readily affected by light (drapes, furs, pictures). Doing so may result in fire, deterioration and/or fading of the material.
- Do not install in places where the ceiling material is made of a special material, such as wire screen, even with luminaires made for under-eave applications. Rain water may get on the device, causing fire or electrical shock.
- Do not use in locations subject to extreme temperature differences. Condensation inside the device may cause fire, electrical shock or result in injury due to the lamp breaking.

[Water-proof Luminaires]

- Do not use moisture-proof luminaires where rain water may get on them. Doing so may cause fire or electrical shock.
- Do not use weather-proof luminaires in humid locations. Doing so may cause fire or electrical shock.
- Prior to using types with shades on or near roads, please consult with us, as this may cause the reflective plates to fall off due to strong winds and/or vibration.
- Do not install weather/moisture-proof luminaires designed for ceiling applications vertically or on a slant in locations outdoors or where water can get on them. Doing so may cause fire or electrical shock. Also, use vertical/horizontal brackets.
- Use in an ambient temperature range of 5°C to 35°C. If used in very hot places, fire or electrical shock may result. Similarly, in very cold places, the lamp may fail to light.
- Do not use in locations subject to vibration or shock. Doing so may cause the light to fail or a fire or electrical shock.
- Places where they can be used

Moisture-proof type	Humid locations, such as kitchens or bathrooms
Weather-proof type	Places hit by rain, such as under eaves, side of houses, etc.
Dual weather/moisture-proof type	Places where weather/moisture-proof types can be used

⚠ Safety Precautions

- Luminaires have a life span. Eight to ten years after installation, they may look fine on the outside, but deterioration of internal parts will be advanced.
  * Conditions of use are an ambient temperature of 30°C, lit 10hours/day and 3,000hours per year. (As per the description in JIS C8105-1)
- Continued use over a long period without inspections may on rare occasions result in smoke, fire and/or electrical shock.

INDEX

INDEX

IWASAKI

IWASAKI ELECTRIC CO., LTD.

Bakurocho-daiichi Building, 1-4-16, Nihonbashi-bakurocho,
Chuo-ku, Tokyo 103-0002, Japan
Tel: +81-3-5847-8630 Fax: +81-3-5847-8647
www.eye.co.jp

Overseas sales offices

Australia:
EYE Lighting Australia Pty Ltd.
15 Industrial Avenue
Wacol QLD 4076, Australia
PO Box 306, Carole Park QLD 4300, Australia
Tel: +61-7-3335-3588
Fax: +61-7-3335-3533
E-mail: info@eli.com.au
www.eyelighting.com.au

Hong Kong:
EYE Lighting (Hong Kong) Ltd.
Room 609, Silvercord Tower 2
30 Canton Road, Tst, Kowloon
Hong Kong
Tel: +852-2368-8782
Fax: +852-2481-2661
E-mail: contact@eyelighting.com.hk
www.eyelighting.com.hk

New Zealand:
EYE Lighting New Zealand Ltd.
18 Levene Place, Mt.Wellington,
Auckland, New Zealand
Tel: +64-9-276-8099
Fax: +64-9-276-3474

Shanghai, China:
Shanghai Iwasaki Electric Co., Ltd.
Room 2512 Bldg. "B" Far International Plaza
No.317 Xianxia Road, Shanghai, China
Tel: +86 21-62351352 62351623
Fax: +86 21-62351353
E-mail: sales2@shiwasaki.com.cn
www.shiwasaki.com.cn

Singapore:
EYE Lighting Asia Pacific Pte Ltd.
21, Kaki Bukit Place, Eunos Techpark
Singapore 416199
Tel: +65-6742-3611
Fax: +65-6743-5202
E-mail: support@eyelighting.com.sg

UK:
EYE Lighting Europe Ltd.
Unit 2, Eskdale Road, Uxbridge
Middlesex UB8 2RT, UK
Tel. +44-1895-814418
Fax: +44-1895-814666
E-mail: sales@eyelighting.co.uk
www.eyelighting.co.uk

USA:
EYE Lighting International
of North America, Inc.
9150 Hendricks Rd.
Mentor, OH 44060-2146, USA
Tel: +1-440-350-7000
Fax: +1-440-350-7001
E-mail: sales@eyelighting.com
www.eyelighting.com

MIX
Paper from responsible sources
FSC® C022784

ECO Choice®

LDC-1. 12. 08 Printed in Japan